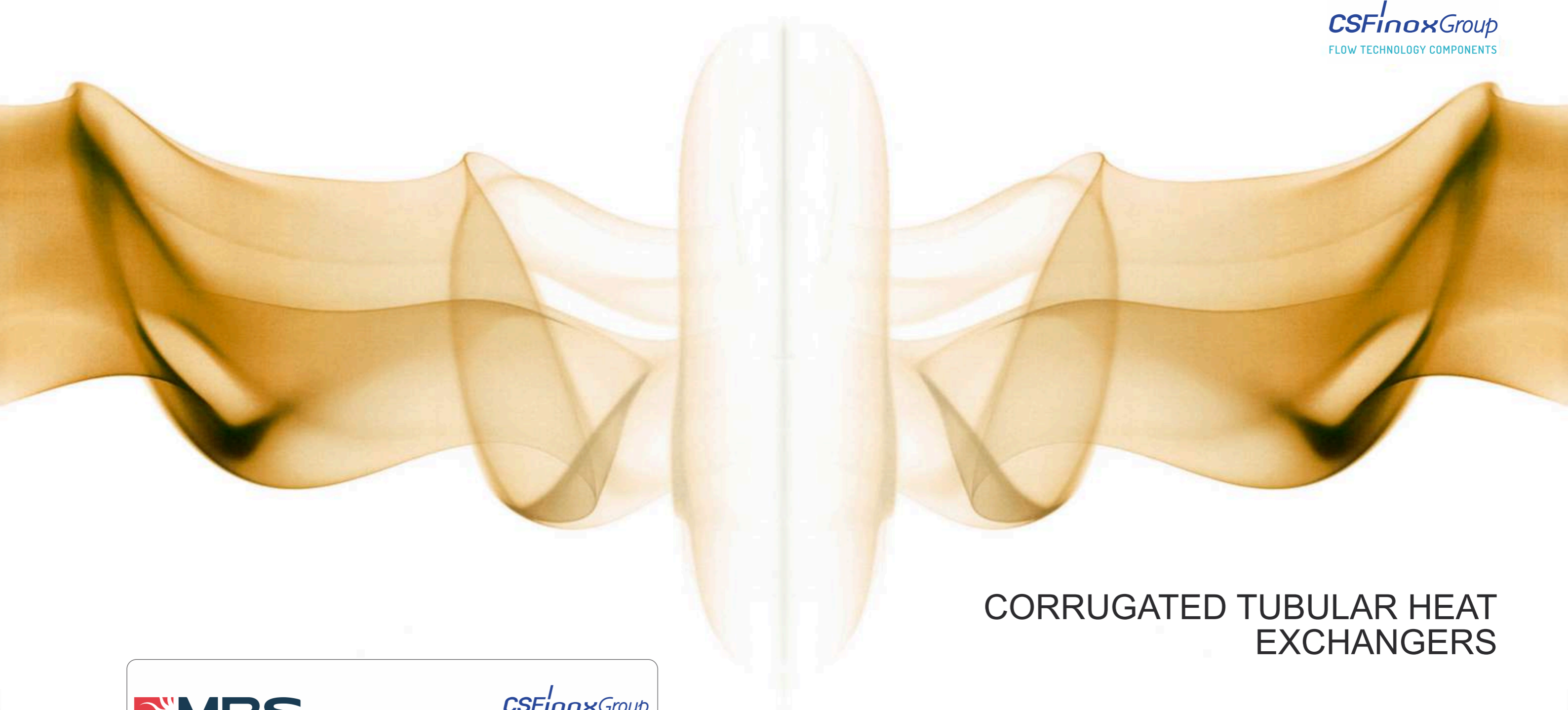


MIXFLO

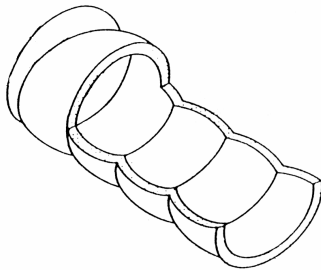
MULTITUBE SANITARY SERIE

CSFinoxGroup
FLOW TECHNOLOGY COMPONENTS



CORRUGATED TUBULAR HEAT
EXCHANGERS

Sanitary mixflo multitube serie



THE CORRUGATION

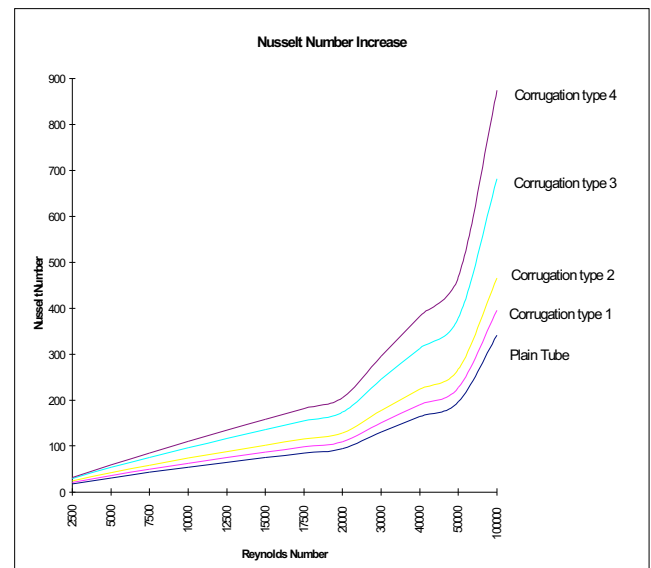
Corrugation is a particular processing applied on plain tubes to induce dynamic turbulence during the liquids flowing allowing thermal exchange optimization.

With corrugated tubes the thermal exchange efficiency can be enhanced by 40% up to 90% according to the following parameters:

- type of product
- selected profile
- type of application

ADVANTAGES

- reduced exchange surfaces
- reduced contact and standing product time inside the element
- reduced washing time thanks to a higher action produced by turbulence
- vertical or horizontal installation
- working possibilities with high pressures and temperatures
- gaskets-free design so lower maintenance costs
- easy to install and exchanger modularity



Sanitary mixflo multitube serie

The Multitube MIXFLO Heat Exchanger is manufactured by small diameter tubes fitted inside an external jacket and welded from one end to the other.

The product to be thermally processed flows inside the smaller tube while service fluid flows inside the (external) jacket.

Multitube MIXFLO Heat Exchanger is fully welded.

Application range

Particularly suited for thermal exchange process of products having a low or medium viscosity even with particulates.

Standard materials

Stainless steel AISI 304 / 316 L
(Other kind of materials are available on request)

Finishing

Product side Ra < 0.8 µm

Standard pressure project

10 bar
(Higher pressures are available depending on utilized connections)

Standard temperature project

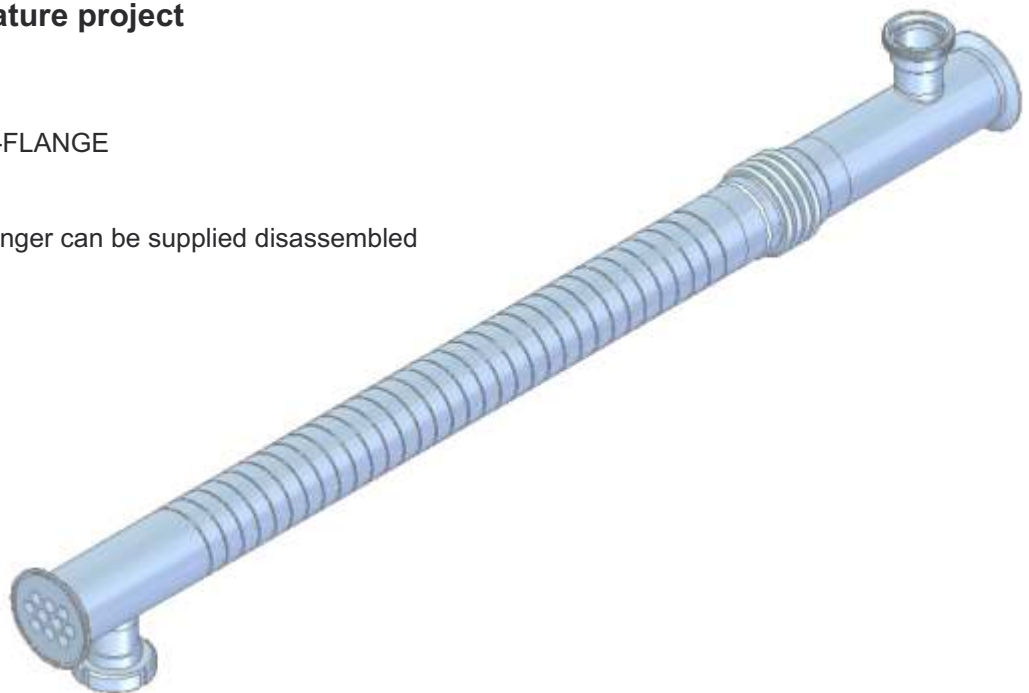
184°C

Connections

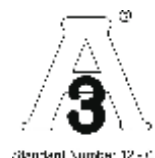
DIN-CLAMP-SMS-BS-FLANGE

Options

Monotube Heat Exchanger can be supplied disassembled



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



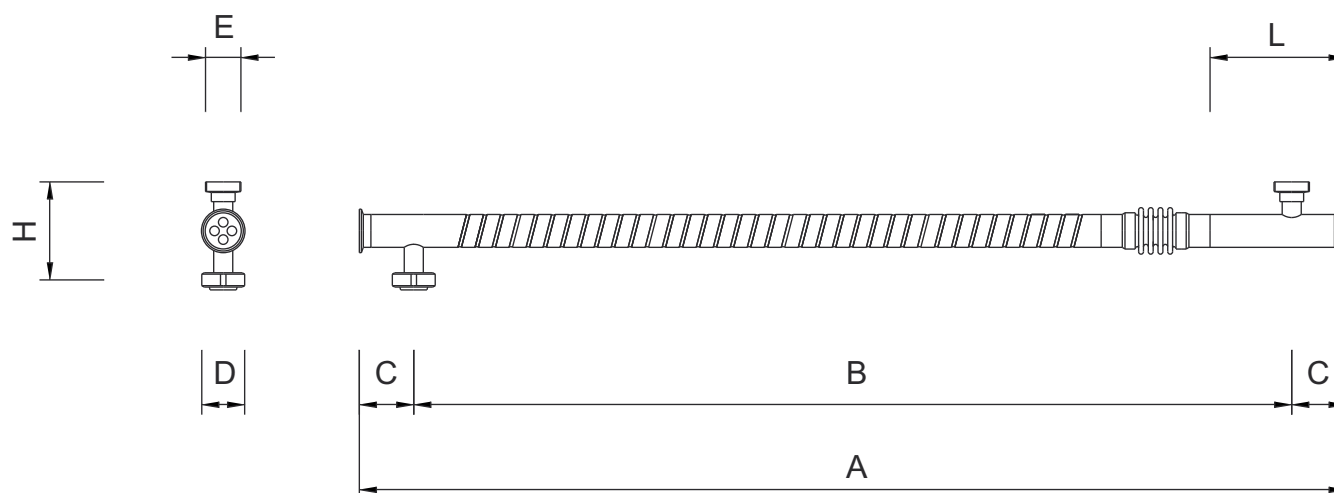
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 48 4 16 1 1000 | 0.78 | 0.56 | 0.18 | 807.46 | 615.75 | 4.2 |
| MLW 48 4 16 1 1500 | 1.19 | 0.87 | 0.28 | 807.46 | 615.75 | 5.8 |
| MLW 48 4 16 1 2000 | 1.59 | 1.18 | 0.38 | 807.46 | 615.75 | 7.4 |
| MLW 48 4 16 1 3000 | 2.40 | 1.79 | 0.59 | 807.46 | 615.75 | 10.6 |
| MLW 48 4 16 1 6000 | 4.82 | 3.64 | 1.19 | 807.46 | 615.75 | 20.2 |

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 |
| MLW 48 4 16 1 1000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 48 4 16 1 1500 | Shell / Tubes | | | | | | | | | | | | |
| MLW 48 4 16 1 2000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 48 4 16 1 3000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 48 4 16 1 6000 | Shell / Tubes | | | | | | | | | 10.3 | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|-------------------------------|---------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 48 4 16 1 1000 | 950 | 790 | 80 | DIN 11851 DN 50 F CLAMP 2" | DIN 11851 DN 25 M/F CLAMP 1" | 144 | 200 |
| MLW 48 4 16 1 1500 | 1450 | 1290 | | | | | |
| MLW 48 4 16 1 2000 | 1950 | 1790 | | | | | |
| MLW 48 4 16 1 3000 | 2950 | 2790 | | | | | |
| MLW 48 4 16 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

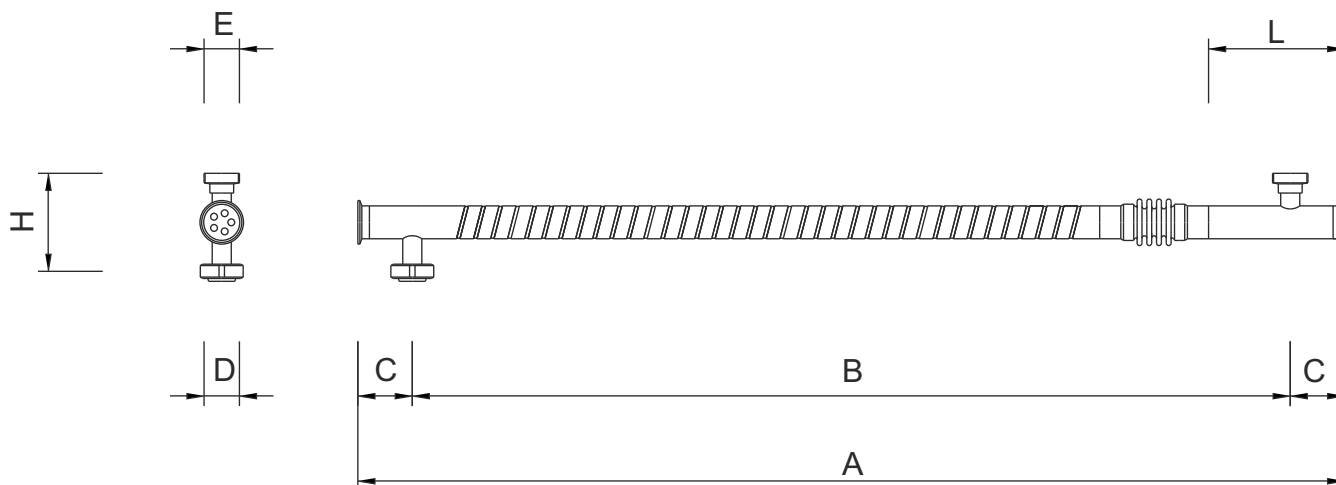
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 48 5 12 1 1000 | 1.00 | 0.36 | 0.17 | 1046.22 | 392.70 | 4.1 |
| MLW 48 5 12 1 1500 | 1.52 | 0.55 | 0.27 | 1046.22 | 392.70 | 5.6 |
| MLW 48 5 12 1 2000 | 2.05 | 0.75 | 0.36 | 1046.22 | 392.70 | 7.2 |
| MLW 48 5 12 1 3000 | 3.09 | 1.14 | 0.55 | 1046.22 | 392.70 | 10.3 |
| MLW 48 5 12 1 6000 | 6.23 | 2.32 | 1.11 | 1046.22 | 392.70 | 19.5 |

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 |
| MLW 48 5 12 1 1000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 48 5 12 1 1500 | Shell / Tubes | | | | | | | | | | | | |
| MLW 48 5 12 1 2000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 48 5 12 1 3000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 48 5 12 1 6000 | Shell / Tubes | | | | | | | 8.0 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 48 5 12 1 1000 | 950 | 790 | 80 | DIN 11851 DN 50 F CLAMP 2" more connections on demand | DIN 11851 DN 25 M/F CLAMP 1" more connections on demand | 144 | 200 |
| MLW 48 5 12 1 1500 | 1450 | 1290 | | | | | |
| MLW 48 5 12 1 2000 | 1950 | 1790 | | | | | |
| MLW 48 5 12 1 3000 | 2950 | 2790 | | | | | |
| MLW 48 5 12 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

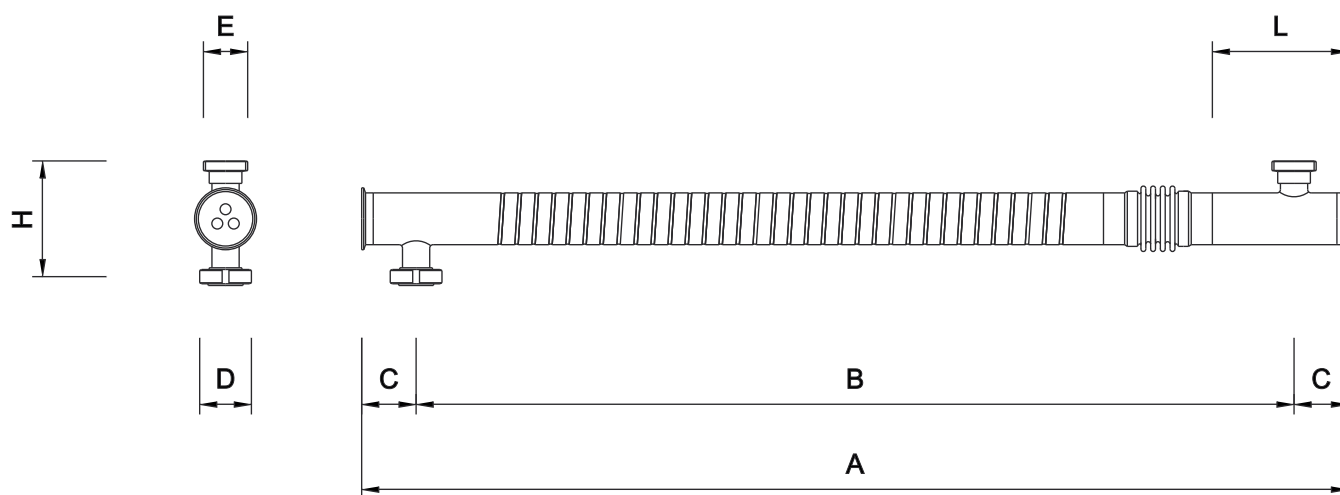
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 3 16 1 1000 | 1.89 | 0.42 | 0.14 | 1975.50 | 461.81 | 5.0 |
| MLW 60 3 16 1 1500 | 2.88 | 0.65 | 0.21 | 1975.50 | 461.81 | 6.6 |
| MLW 60 3 16 1 2000 | 3.86 | 0.88 | 0.29 | 1975.50 | 461.81 | 8.3 |
| MLW 60 3 16 1 3000 | 5.84 | 1.34 | 0.44 | 1975.50 | 461.81 | 11.5 |
| MLW 60 3 16 1 6000 | 11.77 | 2.73 | 0.89 | 1975.50 | 461.81 | 21.4 |

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 |
| MLW 60 3 16 1 1000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 3 16 1 1500 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 3 16 1 2000 | Shell / Tubes | | | | | | | | | | | | 12.9 |
| MLW 60 3 16 1 3000 | Shell / Tubes | | | | | | | | 8.5 | | | | |
| MLW 60 3 16 1 6000 | Shell / Tubes | | | | 4.2 | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 3 16 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 3 16 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 3 16 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 3 16 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 3 16 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

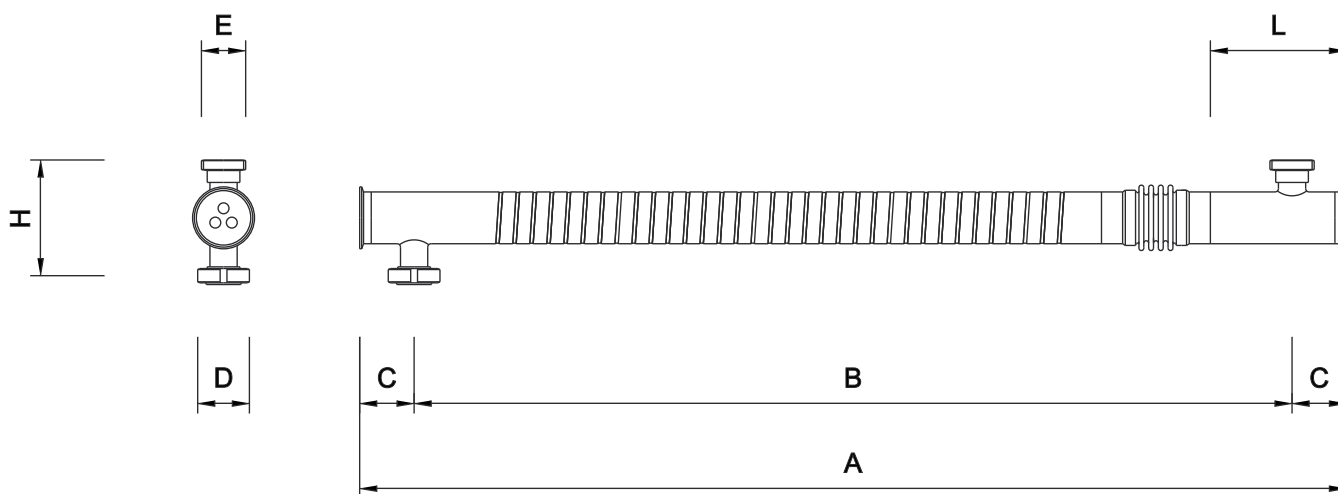
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 3 18 1 1000 | 1.77 | 0.55 | 0.15 | 1815.28 | 603.19 | 5.1 |
| MLW 60 3 18 1 1500 | 2.68 | 0.85 | 0.24 | 1815.28 | 603.19 | 6.8 |
| MLW 60 3 18 1 2000 | 3.59 | 1.15 | 0.32 | 1815.28 | 603.19 | 8.6 |
| MLW 60 3 18 1 3000 | 5.40 | 1.76 | 0.49 | 1815.28 | 603.19 | 12.0 |
| MLW 60 3 18 1 6000 | 10.85 | 3.56 | 1.00 | 1815.28 | 603.19 | 22.2 |

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 | | | |
| MLW 60 3 18 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 60 3 18 1 1500 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 60 3 18 1 2000 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 60 3 18 1 3000 | Shell / Tubes | | | | | | | | | 9.2 | | | | | | |
| MLW 60 3 18 1 6000 | Shell / Tubes | | | | 4.6 | | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 3 18 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 3 18 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 3 18 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 3 18 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 3 18 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

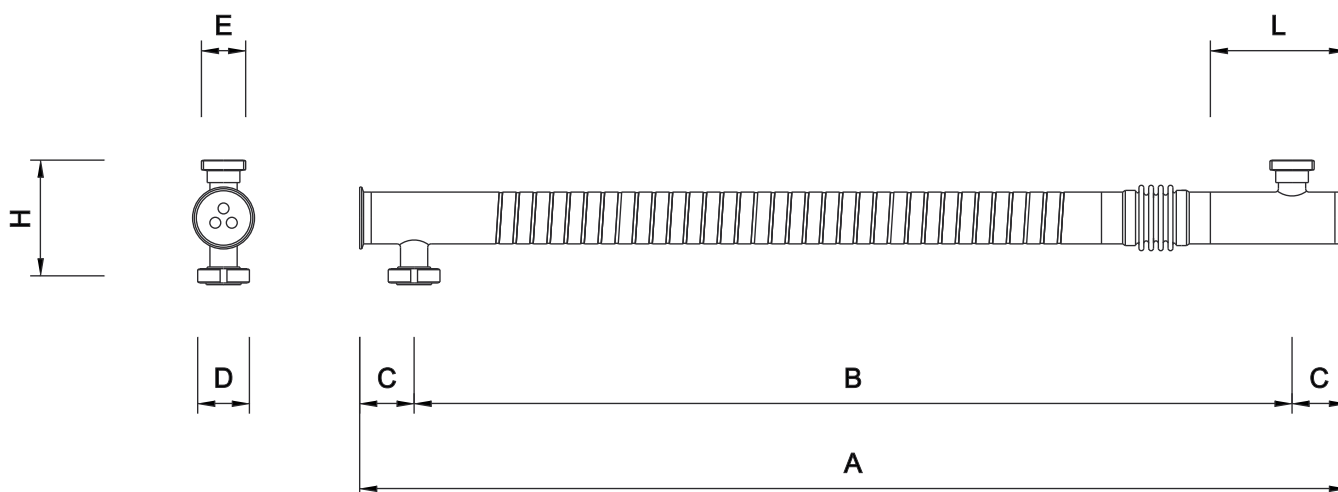
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 3 20 1 1000 | 1.61 | 0.69 | 0.17 | 1636.21 | 763.41 | 5.3 |
| MLW 60 3 20 1 1500 | 2.43 | 1.08 | 0.27 | 1636.21 | 763.41 | 7.0 |
| MLW 60 3 20 1 2000 | 3.24 | 1.46 | 0.36 | 1636.21 | 763.41 | 8.8 |
| MLW 60 3 20 1 3000 | 4.88 | 2.22 | 0.55 | 1636.21 | 763.41 | 12.4 |
| MLW 60 3 20 1 6000 | 9.79 | 4.51 | 1.11 | 1636.21 | 763.41 | 23.1 |

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 |
| MLW 60 3 20 1 1000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 3 20 1 1500 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 3 20 1 2000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 3 20 1 3000 | Shell / Tubes | | | | | | | | | 10.2 | | | |
| MLW 60 3 20 1 6000 | Shell / Tubes | | | | | 5.1 | | | | | | 11 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 3 20 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 3 20 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 3 20 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 3 20 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 3 20 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

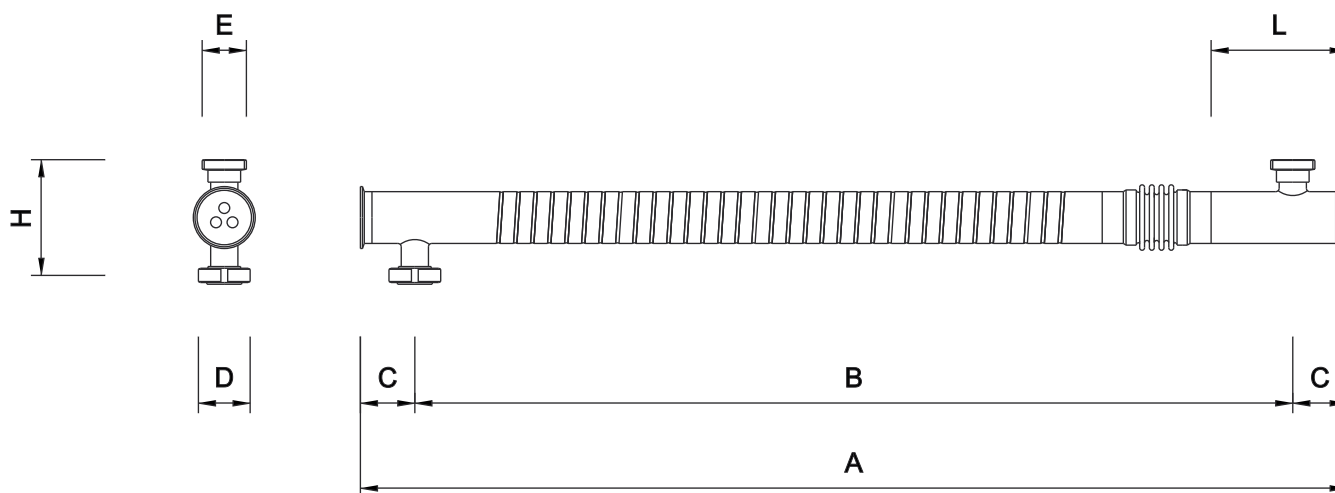
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 3 22 1 1000 | 1.43 | 0.86 | 0.19 | 1438.29 | 942.48 | 5.4 |
| MLW 60 3 22 1 1500 | 2.15 | 1.33 | 0.29 | 1438.29 | 942.48 | 7.3 |
| MLW 60 3 22 1 2000 | 2.87 | 1.80 | 0.40 | 1438.29 | 942.48 | 9.1 |
| MLW 60 3 22 1 3000 | 4.30 | 2.74 | 0.60 | 1438.29 | 942.48 | 12.8 |
| MLW 60 3 22 1 6000 | 8.62 | 5.57 | 1.23 | 1438.29 | 942.48 | 24.0 |

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 |
| MLW 60 3 22 1 1000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 3 22 1 1500 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 3 22 1 2000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 3 22 1 3000 | Shell / Tubes | | | | | | | | | | | 11.6 | |
| MLW 60 3 22 1 6000 | Shell / Tubes | | | | | 5.8 | | | 8.9 | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 3 22 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 3 22 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 3 22 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 3 22 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 3 22 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

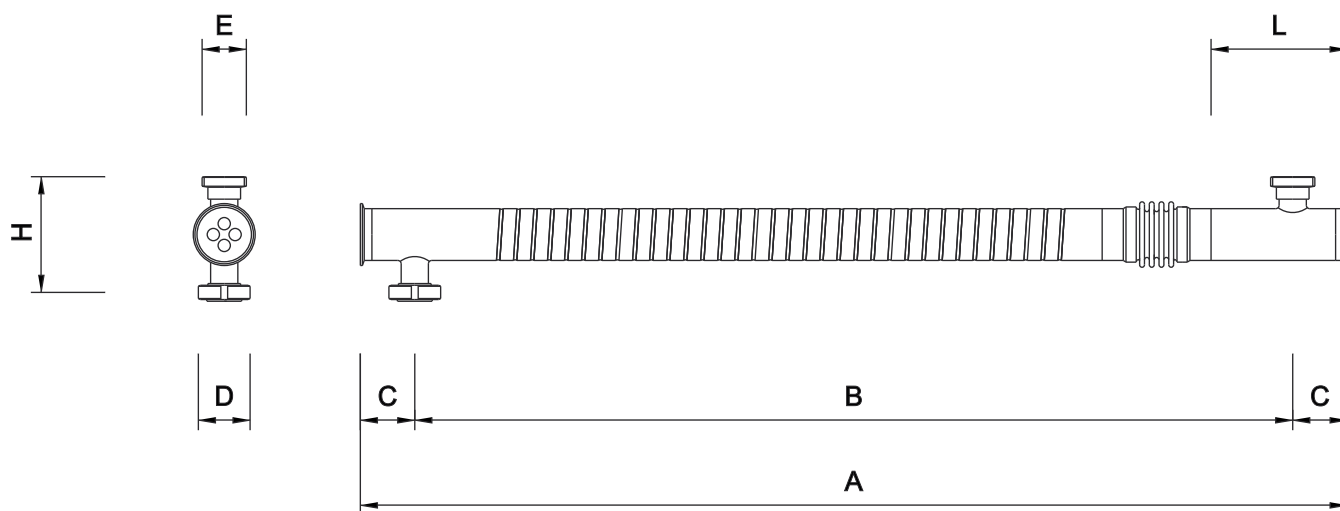
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 4 16 1 1000 | 1.73 | 0.56 | 0.18 | 1774.44 | 615.75 | 5.3 |
| MLW 60 4 16 1 1500 | 2.62 | 0.87 | 0.28 | 1774.44 | 615.75 | 7.2 |
| MLW 60 4 16 1 2000 | 3.51 | 1.18 | 0.38 | 1774.44 | 615.75 | 9.0 |
| MLW 60 4 16 1 3000 | 5.28 | 1.79 | 0.59 | 1774.44 | 615.75 | 12.6 |
| MLW 60 4 16 1 6000 | 10.60 | 3.64 | 1.19 | 1774.44 | 615.75 | 23.5 |

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 | | | |
| MLW 60 4 16 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 60 4 16 1 1500 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 60 4 16 1 2000 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 60 4 16 1 3000 | Shell / Tubes | | | | | | | | | 9.4 | | | | | | |
| MLW 60 4 16 1 6000 | Shell / Tubes | | | | 4.7 | | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 4 16 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 4 16 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 4 16 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 4 16 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 4 16 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

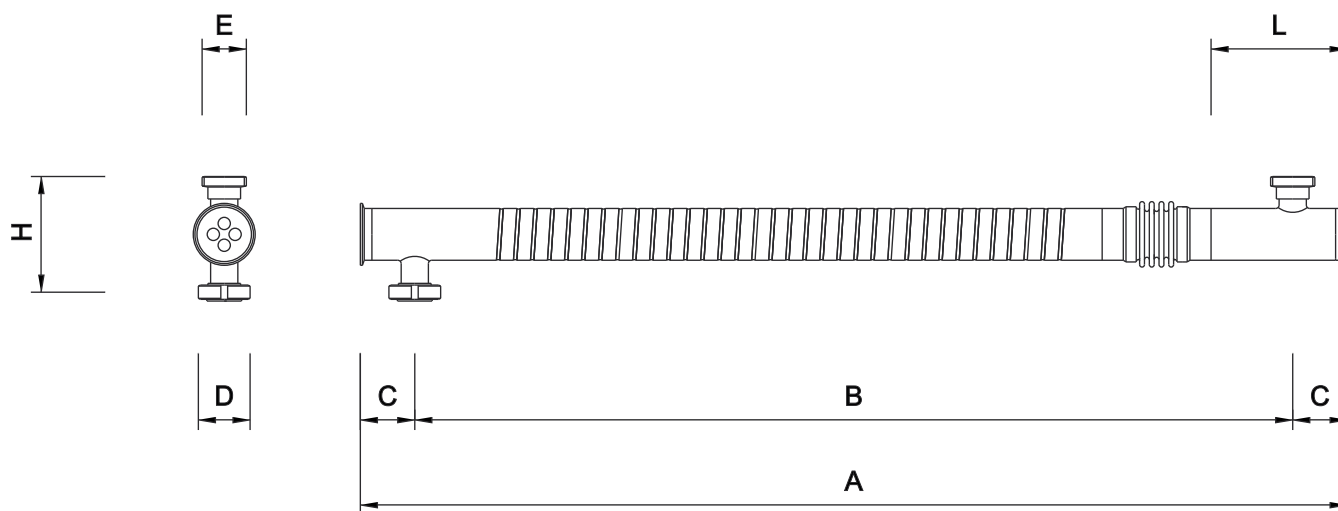
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 4 18 1 1000 | 1.54 | 0.73 | 0.21 | 1560.81 | 804.25 | 5.5 |
| MLW 60 4 18 1 1500 | 2.32 | 1.13 | 0.32 | 1560.81 | 804.25 | 7.4 |
| MLW 60 4 18 1 2000 | 3.10 | 1.54 | 0.43 | 1560.81 | 804.25 | 9.4 |
| MLW 60 4 18 1 3000 | 4.66 | 2.34 | 0.66 | 1560.81 | 804.25 | 13.2 |
| MLW 60 4 18 1 6000 | 9.34 | 4.75 | 1.34 | 1560.81 | 804.25 | 24.7 |

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 |
| MLW 60 4 18 1 1000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 4 18 1 1500 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 4 18 1 2000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 60 4 18 1 3000 | Shell / Tubes | | | | | | | | | 10.7 | | | |
| MLW 60 4 18 1 6000 | Shell / Tubes | | | | | 5.3 | | | | | 10.5 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 4 18 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 4 18 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 4 18 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 4 18 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 4 18 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 4 20 1 1000 | 1.32 | 0.93 | 0.23 | 1322.05 | 1017.88 | 5.7 |
| MLW 60 4 20 1 1500 | 1.98 | 1.44 | 0.35 | 1322.05 | 1017.88 | 7.7 |
| MLW 60 4 20 1 2000 | 2.64 | 1.94 | 0.48 | 1322.05 | 1017.88 | 9.7 |
| MLW 60 4 20 1 3000 | 3.97 | 2.96 | 0.73 | 1322.05 | 1017.88 | 13.8 |
| MLW 60 4 20 1 6000 | 7.93 | 6.02 | 1.49 | 1322.05 | 1017.88 | 25.9 |

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

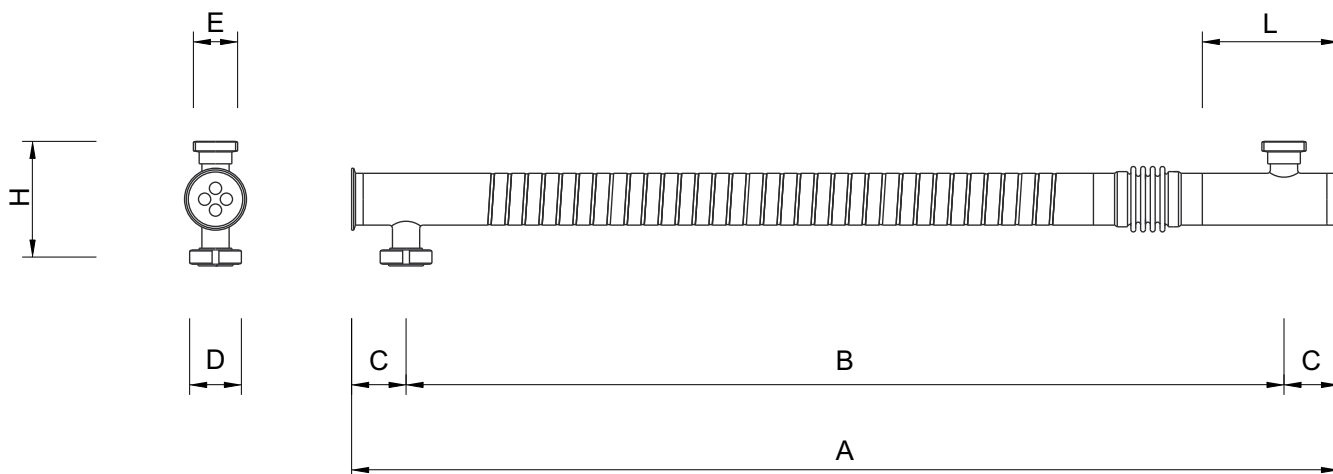
Article 4.3

1st Category

2nd Category

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | |
|--------------------|-------------------|--------------------|---|---|---|---|-----|---|-----|---|----|----|----|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| MLW 60 4 20 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 60 4 20 1 1500 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 60 4 20 1 2000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 60 4 20 1 3000 | Shell / Tubes | | | | | | | | | | | | | 12.5 |
| MLW 60 4 20 1 6000 | Shell / Tubes | | | | | | 6.3 | | 8.3 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 4 20 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 4 20 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 4 20 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 4 20 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 4 20 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

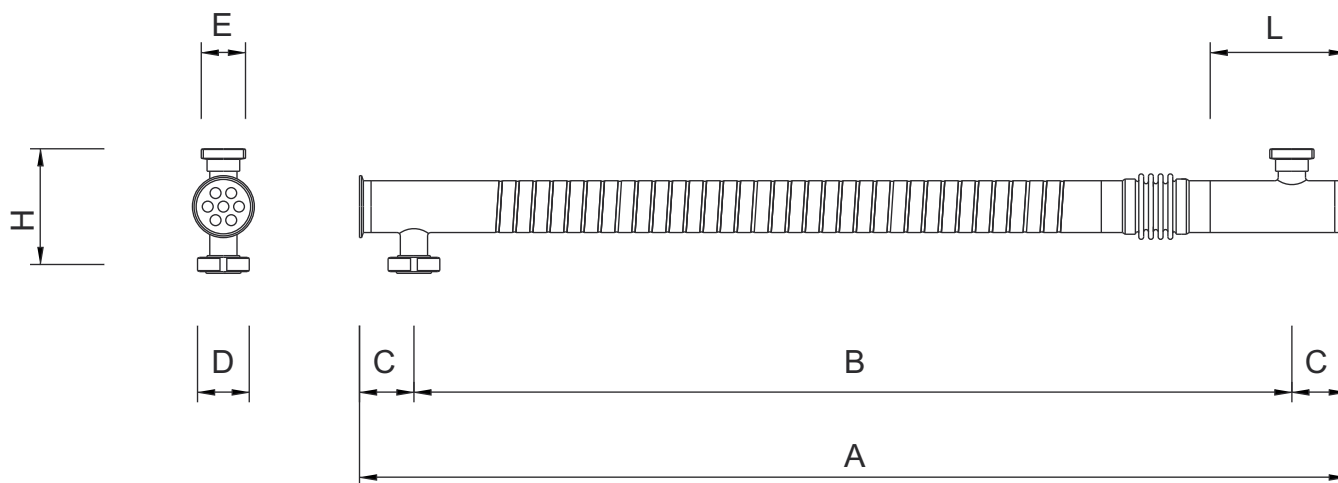
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 7 12 1 1000 | 1.74 | 0.50 | 0.24 | 1787.01 | 549.78 | 5.7 |
| MLW 60 7 12 1 1500 | 2.64 | 0.78 | 0.37 | 1787.01 | 549.78 | 7.7 |
| MLW 60 7 12 1 2000 | 3.53 | 1.05 | 0.50 | 1787.01 | 549.78 | 9.8 |
| MLW 60 7 12 1 3000 | 5.32 | 1.60 | 0.77 | 1787.01 | 549.78 | 13.8 |
| MLW 60 7 12 1 6000 | 10.68 | 3.25 | 1.56 | 1787.01 | 549.78 | 26.0 |

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 | | | | |
| MLW 60 7 12 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | | |
| MLW 60 7 12 1 1500 | Shell / Tubes | | | | | | | | | | | | | | | | |
| MLW 60 7 12 1 2000 | Shell / Tubes | | | | | | | | | | | | | | | | |
| MLW 60 7 12 1 3000 | Shell / Tubes | | | | | | | | | 9.3 | | | | | | | |
| MLW 60 7 12 1 6000 | Shell / Tubes | | | | 4.6 | | | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 7 12 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 7 12 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 7 12 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 7 12 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 7 12 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

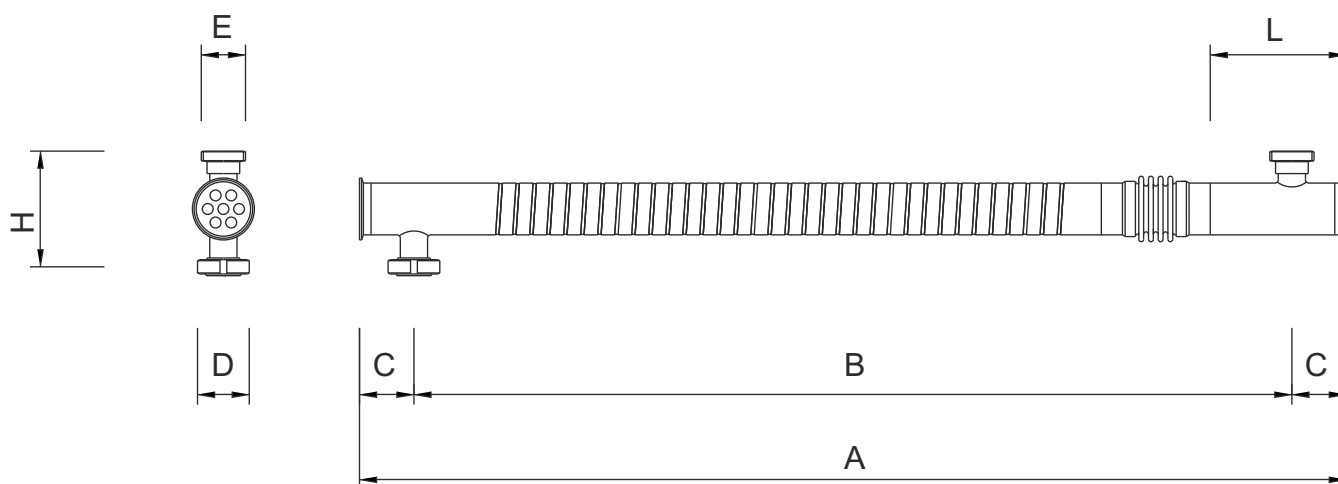
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 60 7 16 1 1000 | 1.18 | 0.98 | 0.32 | 1171.26 | 1077.57 | 6.3 |
| MLW 60 7 16 1 1500 | 1.77 | 1.52 | 0.50 | 1171.26 | 1077.57 | 8.7 |
| MLW 60 7 16 1 2000 | 2.36 | 2.06 | 0.67 | 1171.26 | 1077.57 | 11.1 |
| MLW 60 7 16 1 3000 | 3.53 | 3.14 | 1.02 | 1171.26 | 1077.57 | 15.8 |
| MLW 60 7 16 1 6000 | 7.04 | 6.37 | 2.08 | 1171.26 | 1077.57 | 30.1 |

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 | |
| MLW 60 7 16 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 60 7 16 1 1500 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 60 7 16 1 2000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 60 7 16 1 3000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 60 7 16 1 6000 | Shell / Tubes | | | | | | | 7.1 | 7.8 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|--|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 60 7 16 1 1000 | 950 | 790 | 80 | DIN 11851 DN 65 F CLAMP 2" ½ more connections on demand | DIN 11851 DN 40 M/F CLAMP 1" ½ more connections on demand | 170 | 200 |
| MLW 60 7 16 1 1500 | 1450 | 1290 | | | | | |
| MLW 60 7 16 1 2000 | 1950 | 1790 | | | | | |
| MLW 60 7 16 1 3000 | 2950 | 2790 | | | | | |
| MLW 60 7 16 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

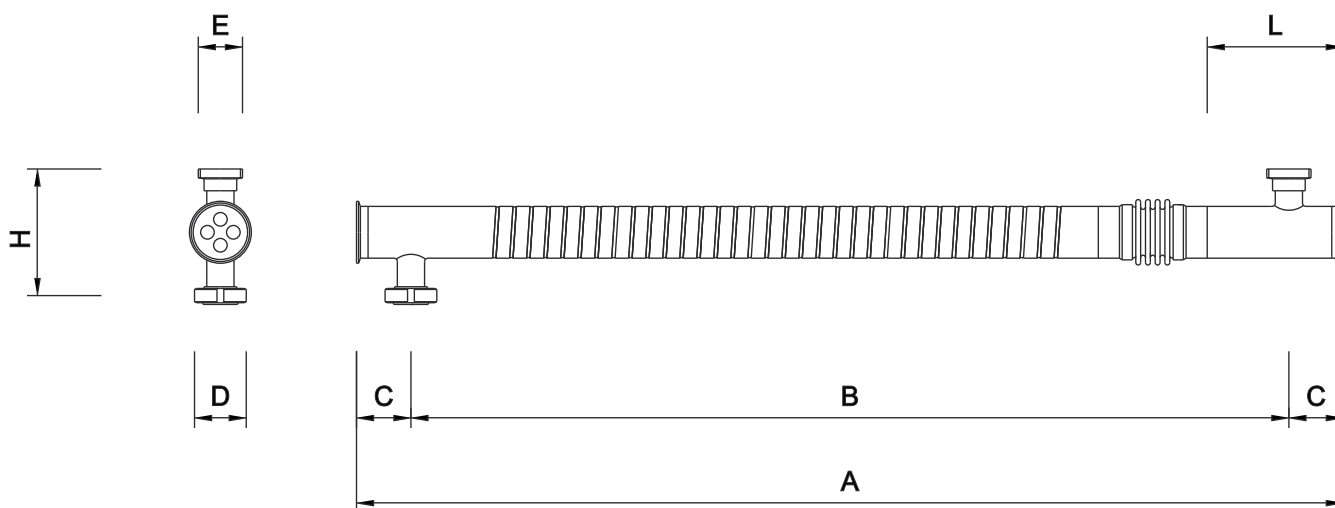
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 4 16 1 1000 | 3.29 | 0.56 | 0.18 | 3392.61 | 615.75 | 7.1 |
| MLW 76 4 16 1 1500 | 4.99 | 0.87 | 0.28 | 3392.61 | 615.75 | 9.2 |
| MLW 76 4 16 1 2000 | 6.69 | 1.18 | 0.38 | 3392.61 | 615.75 | 11.3 |
| MLW 76 4 16 1 3000 | 10.08 | 1.79 | 0.59 | 3392.61 | 615.75 | 15.5 |
| MLW 76 4 16 1 6000 | 20.26 | 3.64 | 1.19 | 3392.61 | 615.75 | 28.2 |

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 | | | |
| MLW 76 4 16 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 76 4 16 1 1500 | Shell / Tubes | | | | | | | | | | 10.0 | | | | | |
| MLW 76 4 16 1 2000 | Shell / Tubes | | | | | | | 7.4 | | | | | | | | |
| MLW 76 4 16 1 3000 | Shell / Tubes | | | | 4.9 | | | | | | | | | | | |
| MLW 76 4 16 1 6000 | Shell / Tubes | | 2.4 | | | | | | | | 9.8 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|-------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 4 16 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" | DIN 11851 DN 40-50 M/F CLAMP 2" | 186 | 200 |
| MLW 76 4 16 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 4 16 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 4 16 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 4 16 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

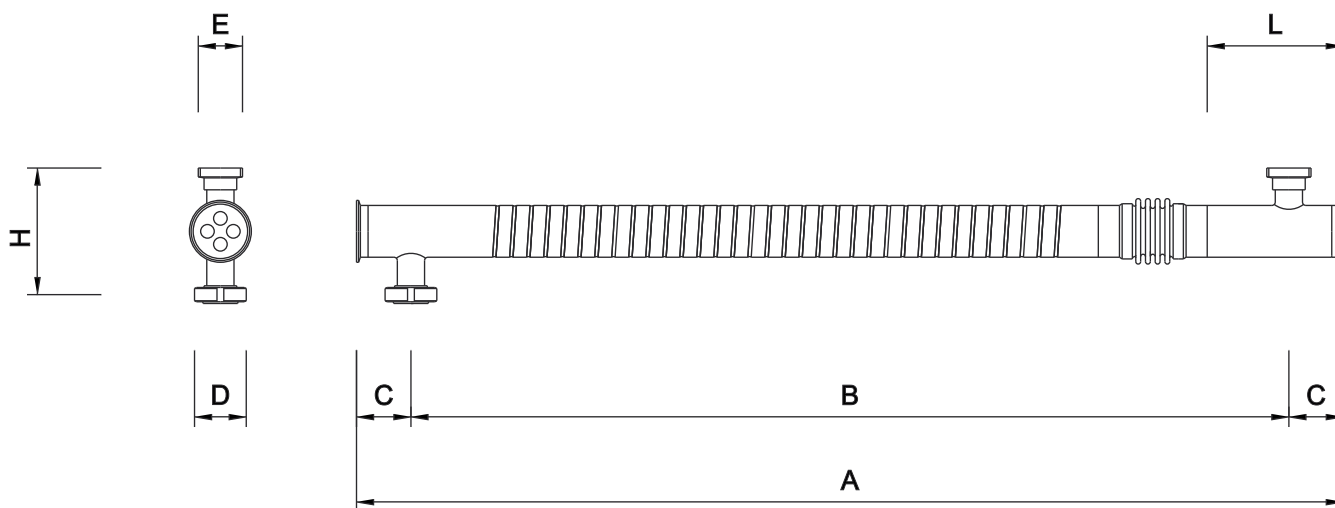
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 4 18 1 1000 | 3.10 | 0.73 | 0.21 | 3178.99 | 804.25 | 7.2 |
| MLW 76 4 18 1 1500 | 4.69 | 1.13 | 0.32 | 3178.99 | 804.25 | 9.4 |
| MLW 76 4 18 1 2000 | 6.28 | 1.54 | 0.43 | 3178.99 | 804.25 | 11.7 |
| MLW 76 4 18 1 3000 | 9.46 | 2.34 | 0.66 | 3178.99 | 804.25 | 16.1 |
| MLW 76 4 18 1 6000 | 19.00 | 4.75 | 1.34 | 3178.99 | 804.25 | 29.3 |

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 | |
| MLW 76 4 18 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 76 4 18 1 1500 | Shell / Tubes | | | | | | | | | | 10.6 | | | |
| MLW 76 4 18 1 2000 | Shell / Tubes | | | | | | | 7.9 | | | | | | |
| MLW 76 4 18 1 3000 | Shell / Tubes | | | | | 5.2 | | | | | | | | |
| MLW 76 4 18 1 6000 | Shell / Tubes | | 2.6 | | | | | | | | 10.5 | 10.5 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|-------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 4 18 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" | DIN 11851 DN 40-50 M/F CLAMP 2" | 186 | 200 |
| MLW 76 4 18 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 4 18 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 4 18 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 4 18 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

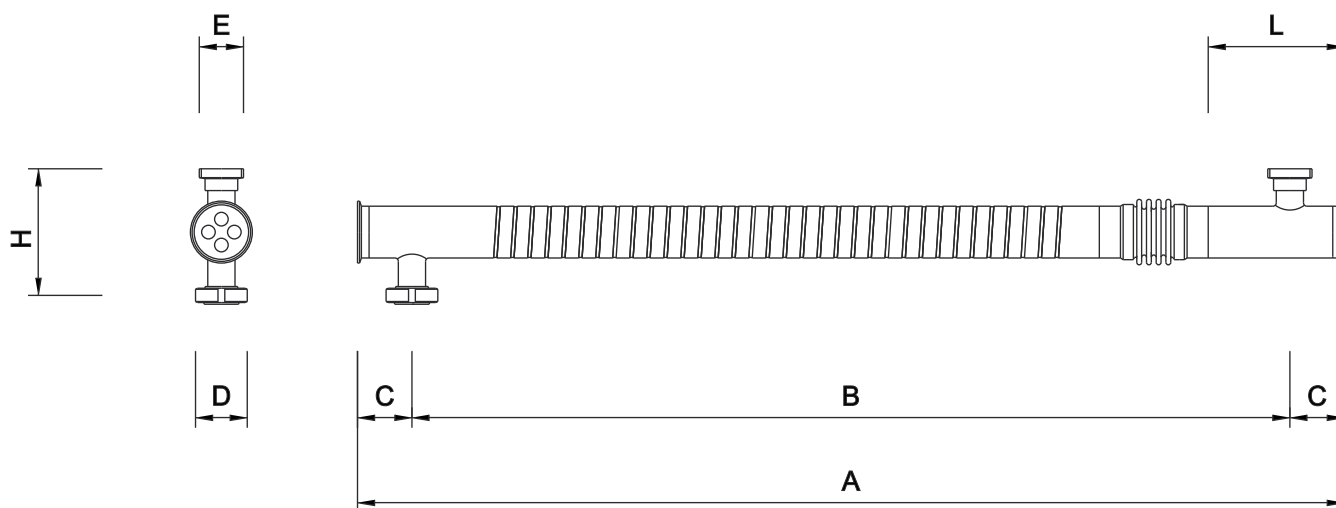
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 4 20 1 1000 | 2.88 | 0.93 | 0.23 | 2940.22 | 1017.88 | 7.4 |
| MLW 76 4 20 1 1500 | 4.35 | 1.44 | 0.35 | 2940.22 | 1017.88 | 9.7 |
| MLW 76 4 20 1 2000 | 5.82 | 1.94 | 0.48 | 2940.22 | 1017.88 | 12.0 |
| MLW 76 4 20 1 3000 | 8.76 | 2.96 | 0.73 | 2940.22 | 1017.88 | 16.6 |
| MLW 76 4 20 1 6000 | 17.58 | 6.02 | 1.49 | 2940.22 | 1017.88 | 30.5 |

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 | |
| MLW 76 4 20 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 76 4 20 1 1500 | Shell / Tubes | | | | | | | | | | | 11.4 | | |
| MLW 76 4 20 1 2000 | Shell / Tubes | | | | | | | 8.5 | | | | | | |
| MLW 76 4 20 1 3000 | Shell / Tubes | | | | | 5.7 | | | | | | | | |
| MLW 76 4 20 1 6000 | Shell / Tubes | | 2.8 | | | | | | | 8.3 | | | 11.3 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|---|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 4 20 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" more connections on demand | DIN 11851 DN 40-50 M/F CLAMP 2" more connections on demand | 186 | 200 |
| MLW 76 4 20 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 4 20 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 4 20 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 4 20 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

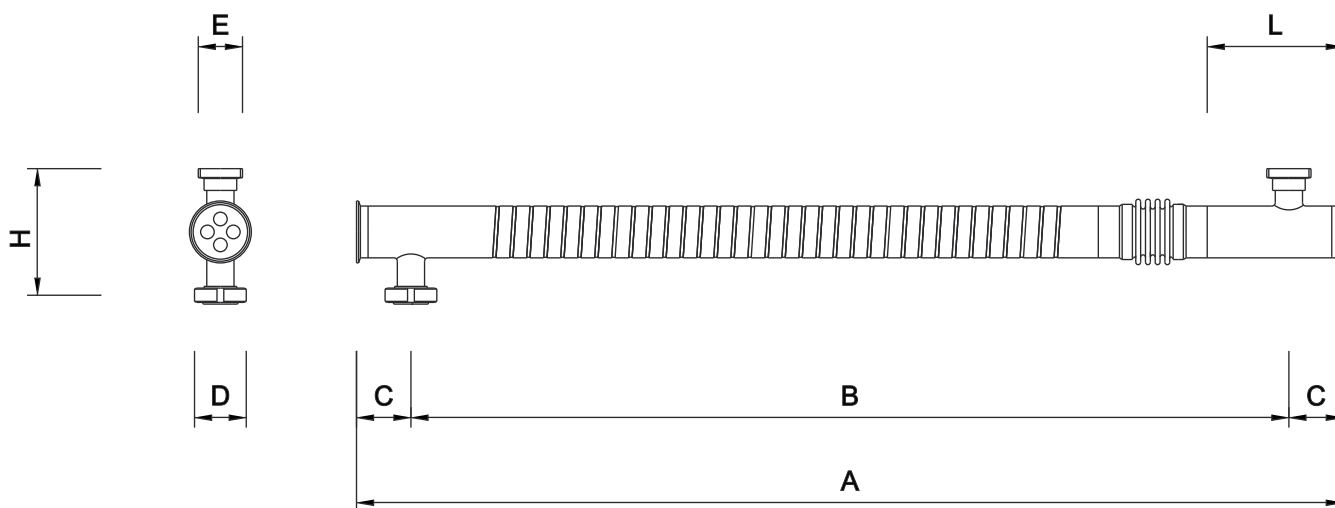
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 4 22 1 1000 | 2.64 | 1.14 | 0.25 | 2676.33 | 1256.64 | 7.6 |
| MLW 76 4 22 1 1500 | 3.98 | 1.77 | 0.39 | 2676.33 | 1256.64 | 10.0 |
| MLW 76 4 22 1 2000 | 5.32 | 2.40 | 0.53 | 2676.33 | 1256.64 | 12.4 |
| MLW 76 4 22 1 3000 | 8.00 | 3.66 | 0.80 | 2676.33 | 1256.64 | 17.2 |
| MLW 76 4 22 1 6000 | 16.02 | 7.43 | 1.63 | 2676.33 | 1256.64 | 31.7 |

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 | |
| MLW 76 4 22 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 76 4 22 1 1500 | Shell / Tubes | | | | | | | | | | | | | 12.5 |
| MLW 76 4 22 1 2000 | Shell / Tubes | | | | | | | | | 9.3 | | | | |
| MLW 76 4 22 1 3000 | Shell / Tubes | | | | | | 6.2 | | | | | | | |
| MLW 76 4 22 1 6000 | Shell / Tubes | | | 3.1 | | | | 6.7 | | | | | | 12.4 |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|---|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 4 22 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" more connections on demand | DIN 11851 DN 40-50 M/F CLAMP 2" more connections on demand | 186 | 200 |
| MLW 76 4 22 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 4 22 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 4 22 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 4 22 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

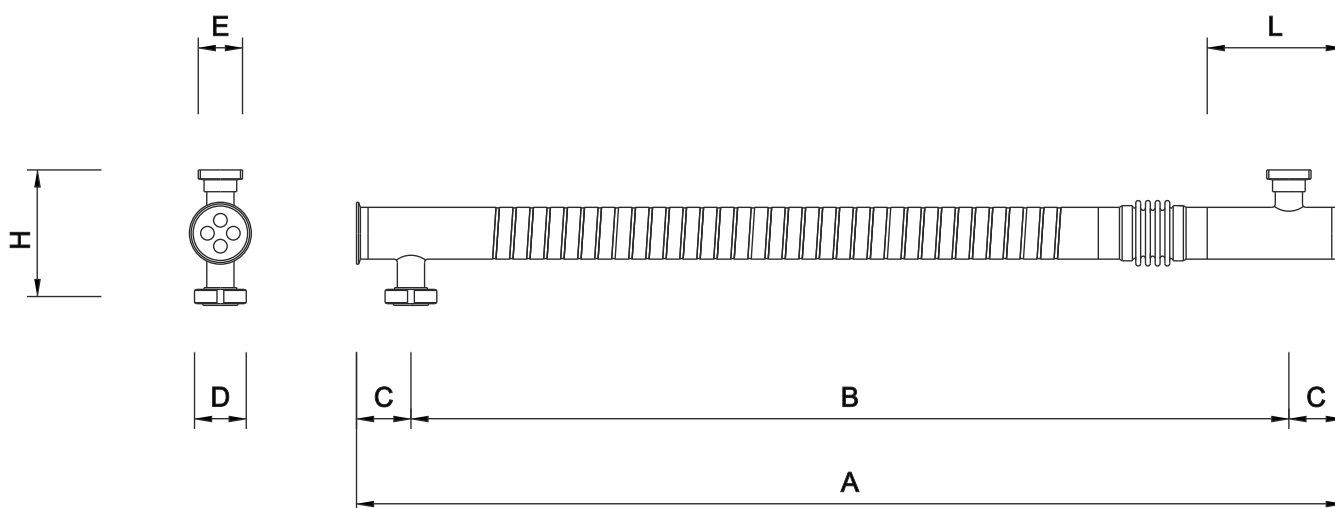
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 4 25 1 1000 | 2.18 | 1.43 | 0.29 | 2170.03 | 1576.33 | 8.9 |
| MLW 76 4 25 1 1500 | 3.27 | 2.22 | 0.45 | 2170.03 | 1576.33 | 12.1 |
| MLW 76 4 25 1 2000 | 4.35 | 3.01 | 0.61 | 2170.03 | 1576.33 | 15.2 |
| MLW 76 4 25 1 3000 | 6.52 | 4.59 | 0.93 | 2170.03 | 1576.33 | 21.5 |
| MLW 76 4 25 1 6000 | 13.03 | 9.32 | 1.89 | 2170.03 | 1576.33 | 40.3 |

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 | |
| MLW 76 4 25 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 76 4 25 1 1500 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 76 4 25 1 2000 | Shell / Tubes | | | | | | | | | | | 11.4 | | |
| MLW 76 4 25 1 3000 | Shell / Tubes | | | | | | | 7.6 | | | | 10.8 | | |
| MLW 76 4 25 1 6000 | Shell / Tubes | | | 3.8 | | | 5.3 | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|-------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 4 25 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" | DIN 11851 DN 40-50 M/F CLAMP 2" | 186 | 200 |
| MLW 76 4 25 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 4 25 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 4 25 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 4 25 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

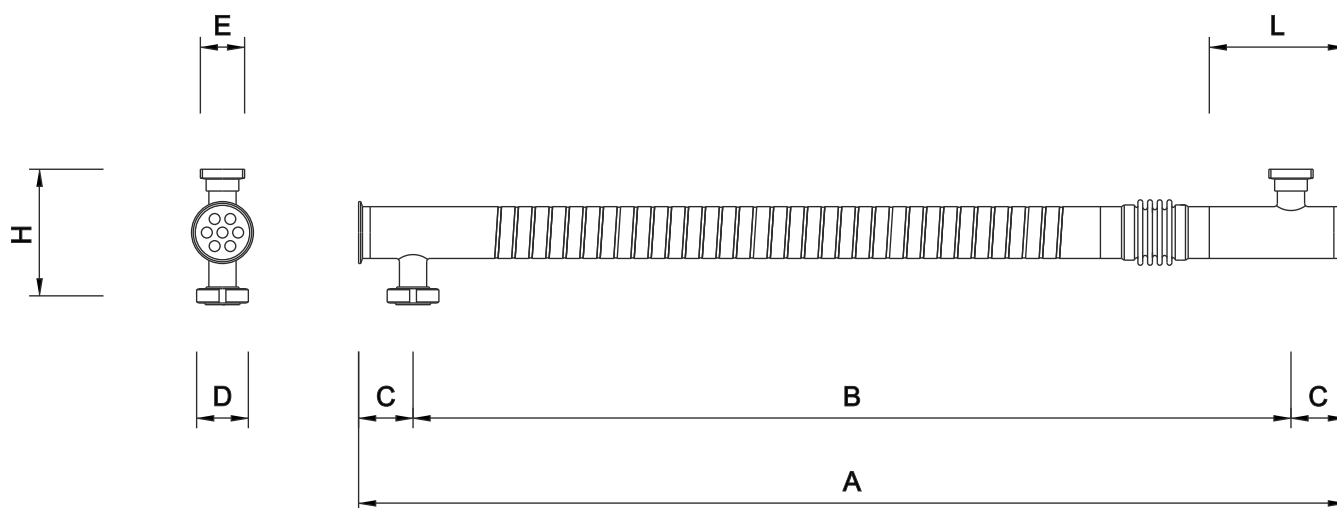
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 7 16 1 1000 | 2.57 | 0.98 | 0.32 | 2789.43 | 1077.57 | 8.1 |
| MLW 76 7 16 1 1500 | 4.14 | 1.52 | 0.50 | 2789.43 | 1077.57 | 10.7 |
| MLW 76 7 16 1 2000 | 5.54 | 2.06 | 0.67 | 2789.43 | 1077.57 | 13.4 |
| MLW 76 7 16 1 3000 | 8.32 | 3.14 | 1.02 | 2789.43 | 1077.57 | 18.7 |
| MLW 76 7 16 1 6000 | 16.69 | 6.37 | 2.08 | 2789.43 | 1077.57 | 34.7 |

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 | |
| MLW 76 7 16 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 76 7 16 1 1500 | Shell / Tubes | | | | | | | | | | | | | 12.0 |
| MLW 76 7 16 1 2000 | Shell / Tubes | | | | | | | | | 9.0 | | | | |
| MLW 76 7 16 1 3000 | Shell / Tubes | | | | | | 6.0 | | | | | | | |
| MLW 76 7 16 1 6000 | Shell / Tubes | | 2.9 | | | | | | 7.8 | | | | 11.9 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|-------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 7 16 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" | DIN 11851 DN 40-50 M/F CLAMP 2" | 186 | 200 |
| MLW 76 7 16 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 7 16 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 7 16 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 7 16 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

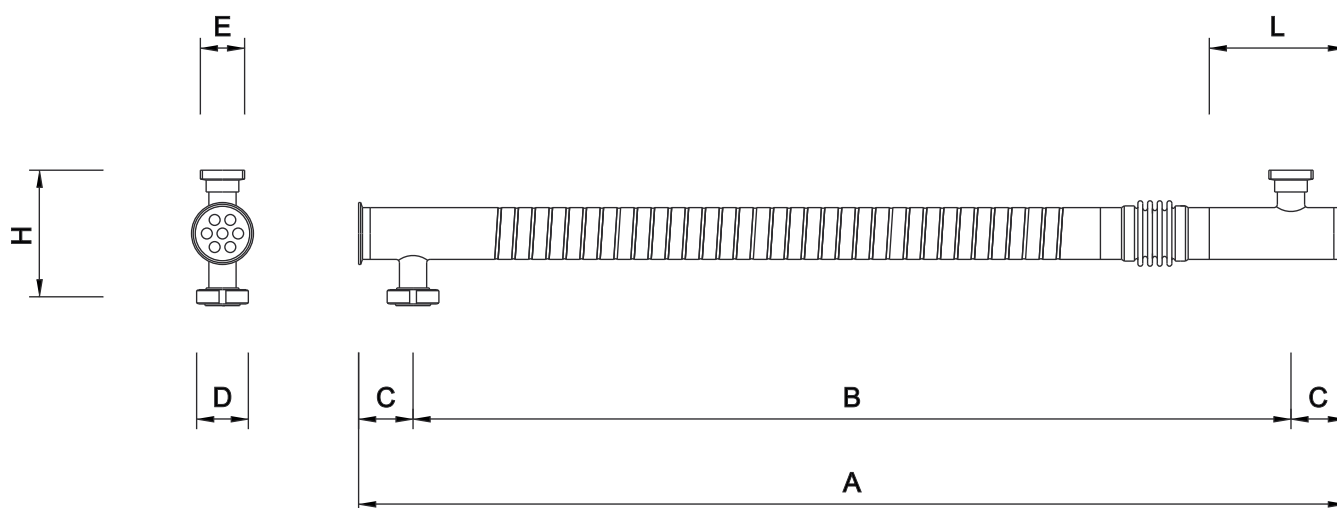
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 7 18 1 1000 | 2.41 | 1.28 | 0.36 | 2415.58 | 1407.43 | 8.4 |
| MLW 76 7 18 1 1500 | 3.61 | 1.98 | 0.56 | 2415.58 | 1407.43 | 11.2 |
| MLW 76 7 18 1 2000 | 4.82 | 2.69 | 0.76 | 2415.58 | 1407.43 | 14.1 |
| MLW 76 7 18 1 3000 | 7.24 | 4.10 | 1.15 | 2415.58 | 1407.43 | 19.7 |
| MLW 76 7 18 1 6000 | 14.48 | 8.32 | 2.34 | 2415.58 | 1407.43 | 36.8 |

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 | | | |
| MLW 76 7 18 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 76 7 18 1 1500 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 76 7 18 1 2000 | Shell / Tubes | | | | | | | | | | 10.3 | | | | | |
| MLW 76 7 18 1 3000 | Shell / Tubes | | | | | | 6.9 | | | | | | | | | 12.1 |
| MLW 76 7 18 1 6000 | Shell / Tubes | | | 3.4 | | | | 6.0 | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|--|---|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 7 18 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" more connections on demand | DIN 11851 DN 40-50 M/F CLAMP 2" more connections on demand | 186 | 200 |
| MLW 76 7 18 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 7 18 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 7 18 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 7 18 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

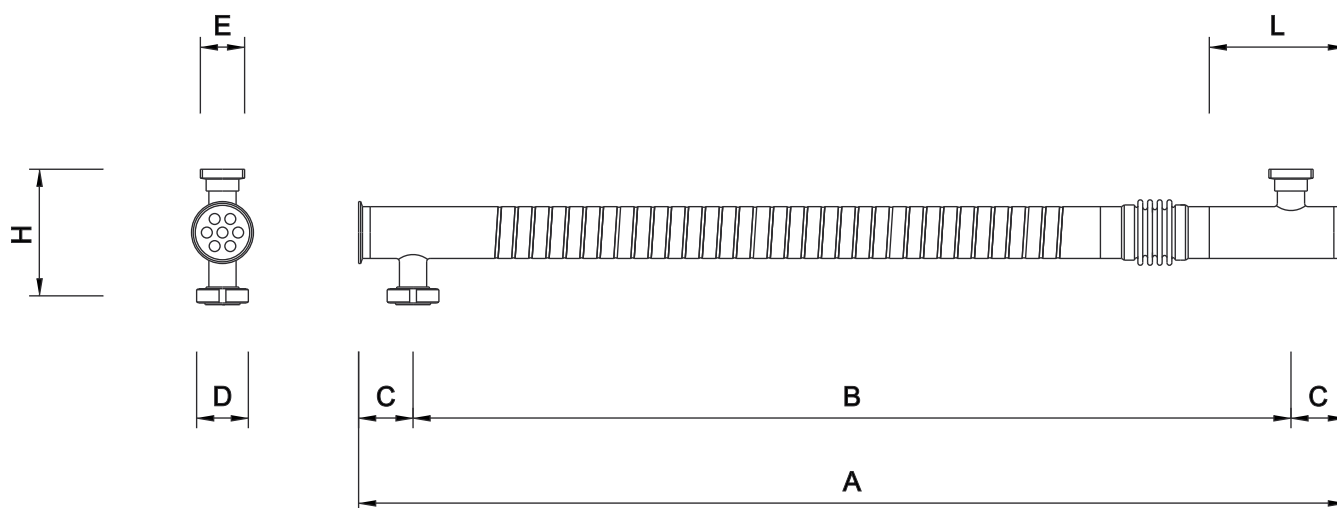
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 7 20 1 1000 | 2.03 | 1.62 | 0.40 | 1997.75 | 1781.28 | 8.7 |
| MLW 76 7 20 1 1500 | 3.02 | 2.51 | 0.62 | 1997.75 | 1781.28 | 11.7 |
| MLW 76 7 20 1 2000 | 4.02 | 3.40 | 0.84 | 1997.75 | 1781.28 | 14.7 |
| MLW 76 7 20 1 3000 | 6.02 | 5.18 | 1.28 | 1997.75 | 1781.28 | 20.7 |
| MLW 76 7 20 1 6000 | 12.01 | 10.53 | 2.60 | 1997.75 | 1781.28 | 38.8 |

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 |
| MLW 76 7 20 1 1000 | Shell / Tubes | | | | | | | | | | | | |
| MLW 76 7 20 1 1500 | Shell / Tubes | | | | | | | | | | | | |
| MLW 76 7 20 1 2000 | Shell / Tubes | | | | | | | | | | | | 12.4 |
| MLW 76 7 20 1 3000 | Shell / Tubes | | | | | | | | 8.3 | 9.6 | | | |
| MLW 76 7 20 1 6000 | Shell / Tubes | | | | 4.1 | 4.7 | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|----|-------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 7 20 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" | DIN 11851 DN 40-50 M/F CLAMP 2" | 186 | 200 |
| MLW 76 7 20 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 7 20 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 7 20 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 7 20 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

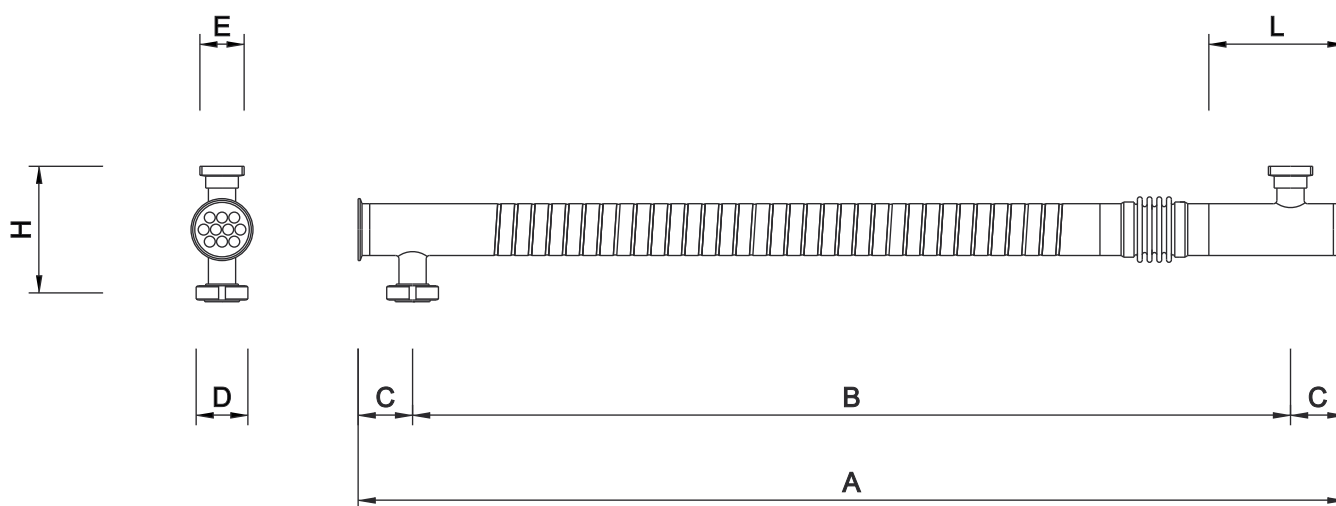
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 10 12 1 1000 | 3.00 | 0.71 | 0.34 | 3065.89 | 785.40 | 9.1 |
| MLW 76 10 12 1 1500 | 4.53 | 1.11 | 0.53 | 3065.89 | 785.40 | 12.3 |
| MLW 76 10 12 1 2000 | 6.06 | 1.50 | 0.72 | 3065.89 | 785.40 | 15.5 |
| MLW 76 10 12 1 3000 | 9.13 | 2.29 | 1.10 | 3065.89 | 785.40 | 22.0 |
| MLW 76 10 12 1 6000 | 18.33 | 4.64 | 2.23 | 3065.89 | 785.40 | 41.3 |

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 | | | |
| MLW 76 10 12 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 76 10 12 1 1500 | Shell / Tubes | | | | | | | | | | | | 11.0 | | | |
| MLW 76 10 12 1 2000 | Shell / Tubes | | | | | | | | 8.2 | | | | | | | |
| MLW 76 10 12 1 3000 | Shell / Tubes | | | | | 5.4 | | | | | | | | | | |
| MLW 76 10 12 1 6000 | Shell / Tubes | | 2.7 | | | | | | | | | 10.9 | 10.7 | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|----|-------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 10 12 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 2" | DIN 11851 DN 40-50 M/F CLAMP 2" | 186 | 200 |
| MLW 76 10 12 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 10 12 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 10 12 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 10 12 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

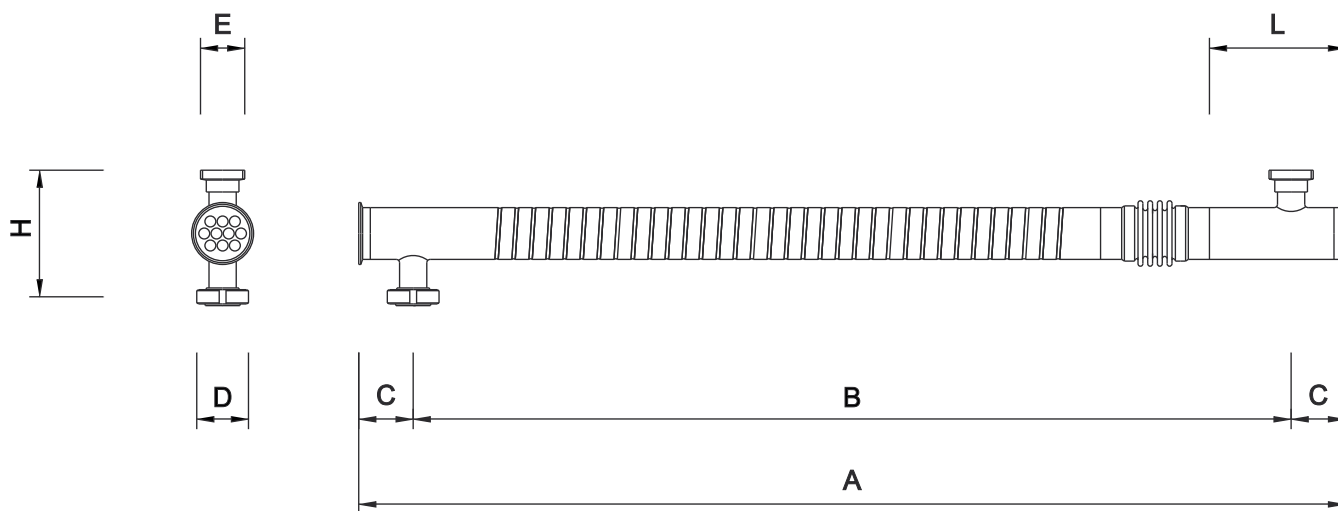
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 76 10 16 1 1000 | 2.20 | 1.40 | 0.46 | 2186.24 | 1539.38 | 9.1 |
| MLW 76 10 16 1 1500 | 3.29 | 2.17 | 0.71 | 2186.24 | 1539.38 | 12.3 |
| MLW 76 10 16 1 2000 | 4.38 | 2.94 | 0.96 | 2186.24 | 1539.38 | 15.5 |
| MLW 76 10 16 1 3000 | 6.57 | 4.48 | 1.46 | 2186.24 | 1539.38 | 22.0 |
| MLW 76 10 16 1 6000 | 13.13 | 9.10 | 2.97 | 2186.24 | 1539.38 | 41.3 |

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 | | | |
| MLW 76 10 16 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 76 10 16 1 1500 | Shell / Tubes | | | | | | | | | | | | | | | |
| MLW 76 10 16 1 2000 | Shell / Tubes | | | | | | | | | | | 11.4 | | | | |
| MLW 76 10 16 1 3000 | Shell / Tubes | | | | | | | 7.6 | | | | | | 11.1 | | |
| MLW 76 10 16 1 6000 | Shell / Tubes | | | 3.8 | | | 5.4 | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|----|-------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 76 10 16 1 1000 | 950 | 790 | 80 | DIN 11851 DN 80 F CLAMP 3" | DIN 11851 DN 40-50 M/F CLAMP 2" | 186 | 200 |
| MLW 76 10 16 1 1500 | 1450 | 1290 | | | | | |
| MLW 76 10 16 1 2000 | 1950 | 1790 | | | | | |
| MLW 76 10 16 1 3000 | 2950 | 2790 | | | | | |
| MLW 76 10 16 1 6000 | 5950 | 5790 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

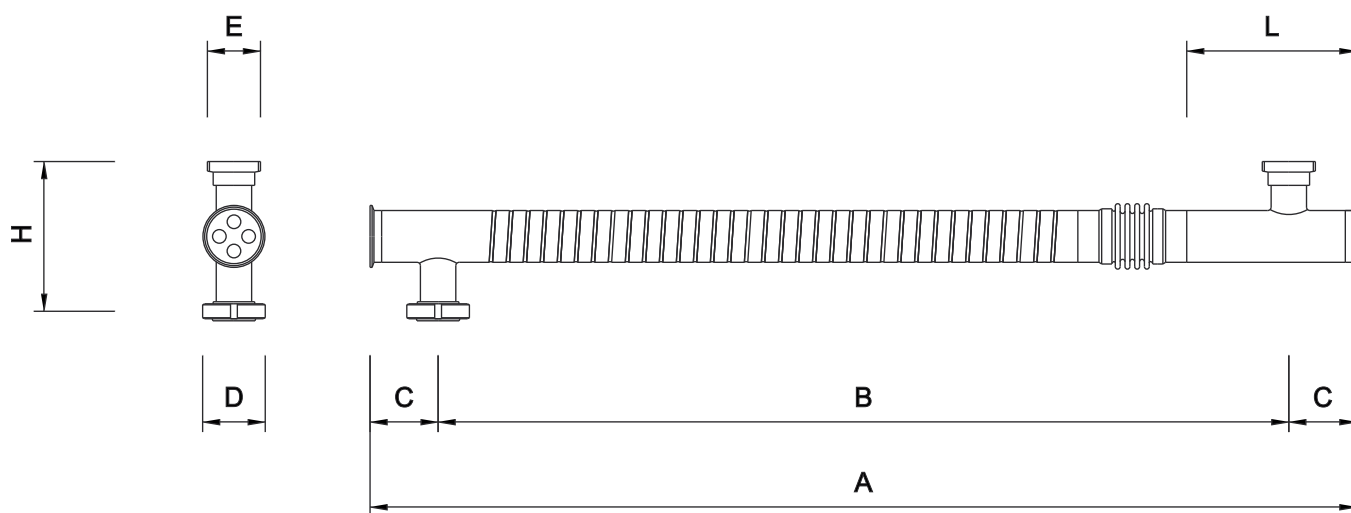
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 4 16 1 1000 | 4.87 | 0.56 | 0.18 | 4856.91 | 615.75 | 9.6 |
| MLW 88 4 16 1 1500 | 7.30 | 0.87 | 0.28 | 4856.91 | 615.75 | 12.5 |
| MLW 88 4 16 1 2000 | 9.73 | 1.18 | 0.38 | 4856.91 | 615.75 | 15.3 |
| MLW 88 4 16 1 3000 | 14.58 | 1.79 | 0.59 | 4856.91 | 615.75 | 21.1 |
| MLW 88 4 16 1 6000 | 29.15 | 3.64 | 1.19 | 4856.91 | 615.75 | 38.3 |

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 |
| MLW 88 4 16 1 1000 | Shell / Tubes | | | | | | | | | | 10.2 | | |
| MLW 88 4 16 1 1500 | Shell / Tubes | | | | | | 6.8 | | | | | | |
| MLW 88 4 16 1 2000 | Shell / Tubes | | | | | 5.1 | | | | | | | |
| MLW 88 4 16 1 3000 | Shell / Tubes | | | 3.4 | | | | | | | | | |
| MLW 88 4 16 1 6000 | Shell / Tubes | 1.7 | | | | | 6.8 | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 4 16 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 4 16 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 4 16 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 4 16 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 4 16 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

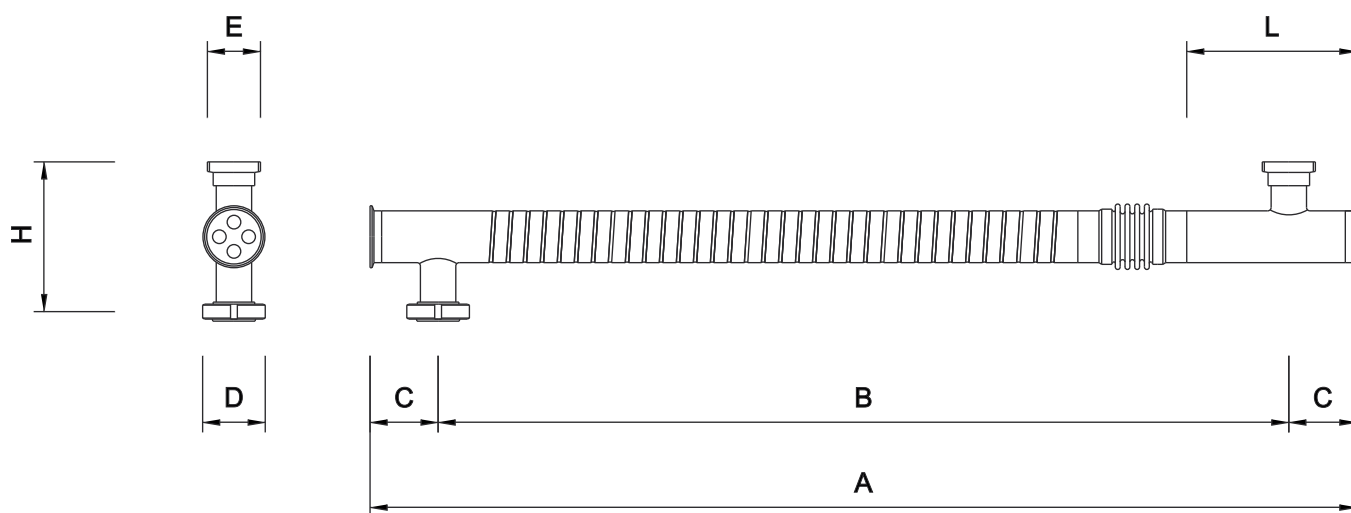
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-----------------------|-----------------------|---------------------------------|----------------------------------|----------------------------------|-------------|
| MLW 88 4 18 1 1000 | 4.67 | 0.73 | 0.21 | 4643.28 | 804.25 | 9.8 |
| MLW 88 4 18 1 1500 | 7.00 | 1.13 | 0.32 | 4643.28 | 804.25 | 12.8 |
| MLW 88 4 18 1 2000 | 9.32 | 1.54 | 0.43 | 4643.28 | 804.25 | 15.7 |
| MLW 88 4 18 1 3000 | 13.96 | 2.34 | 0.66 | 4643.28 | 804.25 | 21.7 |
| MLW 88 4 18 1 6000 | 27.89 | 4.75 | 1.34 | 4643.28 | 804.25 | 39.5 |

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 |
| MLW 88 4 18 1 1000 | Shell / Tubes | | | | | | | | | | 10.7 | | |
| MLW 88 4 18 1 1500 | Shell / Tubes | | | | | | | 7.1 | | | | | |
| MLW 88 4 18 1 2000 | Shell / Tubes | | | | | 5.3 | | | | | | | |
| MLW 88 4 18 1 3000 | Shell / Tubes | | | 3.5 | | | | | | | | | |
| MLW 88 4 18 1 6000 | Shell / Tubes | 1.7 | | | | | | 7.1 | | | 10.5 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-----------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 4 18 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 4 18 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 4 18 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 4 18 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 4 18 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

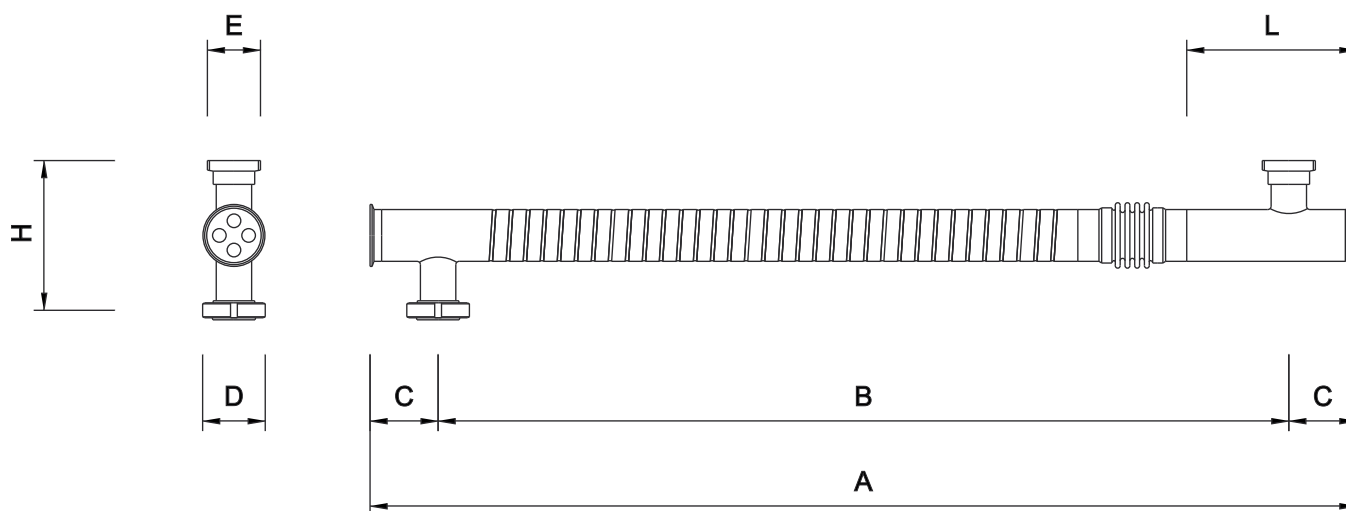
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 4 20 1 1000 | 4.46 | 0.93 | 0.23 | 4404.52 | 1017.88 | 10.0 |
| MLW 88 4 20 1 1500 | 6.66 | 1.44 | 0.35 | 4404.52 | 1017.88 | 13.0 |
| MLW 88 4 20 1 2000 | 8.86 | 1.94 | 0.48 | 4404.52 | 1017.88 | 16.1 |
| MLW 88 4 20 1 3000 | 13.27 | 2.96 | 0.73 | 4404.52 | 1017.88 | 22.2 |
| MLW 88 4 20 1 6000 | 26.48 | 6.02 | 1.49 | 4404.52 | 1017.88 | 40.6 |

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 | |
| MLW 88 4 20 1 1000 | Shell / Tubes | | | | | | | | | | | | 11.2 | |
| MLW 88 4 20 1 1500 | Shell / Tubes | | | | | | | 7.5 | | | | | | |
| MLW 88 4 20 1 2000 | Shell / Tubes | | | | | 5.6 | | | | | | | | |
| MLW 88 4 20 1 3000 | Shell / Tubes | | | 3.7 | | | | | | | | | | |
| MLW 88 4 20 1 6000 | Shell / Tubes | 1.8 | | | | | | 7.5 | | 8.3 | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 4 20 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 4 20 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 4 20 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 4 20 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 4 20 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

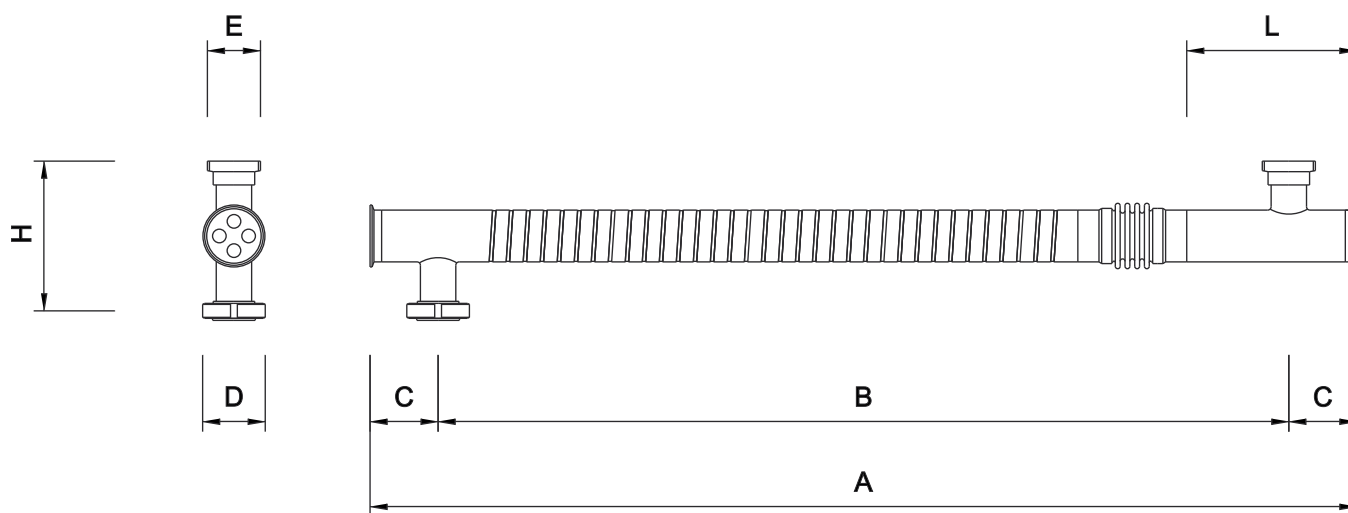
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 4 22 1 1000 | 4.22 | 1.14 | 0.25 | 4140.63 | 1256.64 | 10.1 |
| MLW 88 4 22 1 1500 | 6.29 | 1.77 | 0.39 | 4140.63 | 1256.64 | 13.3 |
| MLW 88 4 22 1 2000 | 8.36 | 2.40 | 0.53 | 4140.63 | 1256.64 | 16.5 |
| MLW 88 4 22 1 3000 | 12.50 | 3.66 | 0.80 | 4140.63 | 1256.64 | 22.8 |
| MLW 88 4 22 1 6000 | 24.92 | 7.43 | 1.63 | 4140.63 | 1256.64 | 41.8 |

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 | |
| MLW 88 4 22 1 1000 | Shell / Tubes | | | | | | | | | | | | 11.8 | |
| MLW 88 4 22 1 1500 | Shell / Tubes | | | | | | | 7.9 | | | | | | |
| MLW 88 4 22 1 2000 | Shell / Tubes | | | | | 5.9 | | | | | | | | |
| MLW 88 4 22 1 3000 | Shell / Tubes | | | | 4.0 | | | | | | | | | |
| MLW 88 4 22 1 6000 | Shell / Tubes | | 2.0 | | | | | 6.7 | | 8.0 | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|---|---|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 4 22 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 250 |
| MLW 88 4 22 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 4 22 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 4 22 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 4 22 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

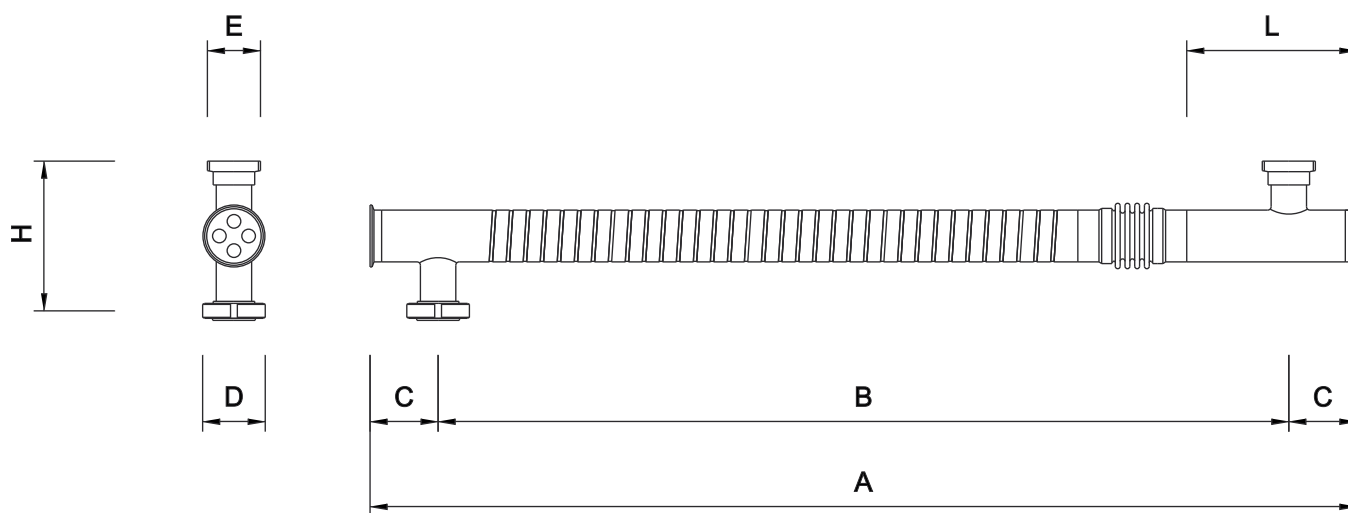
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 4 25 1 1000 | 3.76 | 1.43 | 0.29 | 3634.33 | 1576.33 | 11.51 |
| MLW 88 4 25 1 1500 | 5.57 | 2.22 | 0.45 | 3634.33 | 1576.33 | 15.4 |
| MLW 88 4 25 1 2000 | 7.39 | 3.01 | 0.61 | 3634.33 | 1576.33 | 19.3 |
| MLW 88 4 25 1 3000 | 11.02 | 4.59 | 0.93 | 3634.33 | 1576.33 | 27.1 |
| MLW 88 4 25 1 6000 | 21.93 | 9.32 | 1.89 | 3634.33 | 1576.33 | 50.5 |

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 | |
| MLW 88 4 25 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 88 4 25 1 1500 | Shell / Tubes | | | | | | | | 8.9 | | | | | |
| MLW 88 4 25 1 2000 | Shell / Tubes | | | | | | 6.7 | | | | | | | |
| MLW 88 4 25 1 3000 | Shell / Tubes | | | | 4.5 | | | | | | | 10.8 | | |
| MLW 88 4 25 1 6000 | Shell / Tubes | | 2.2 | | | | 5.3 | | | | 9.1 | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 4 25 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 4 25 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 4 25 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 4 25 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 4 25 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

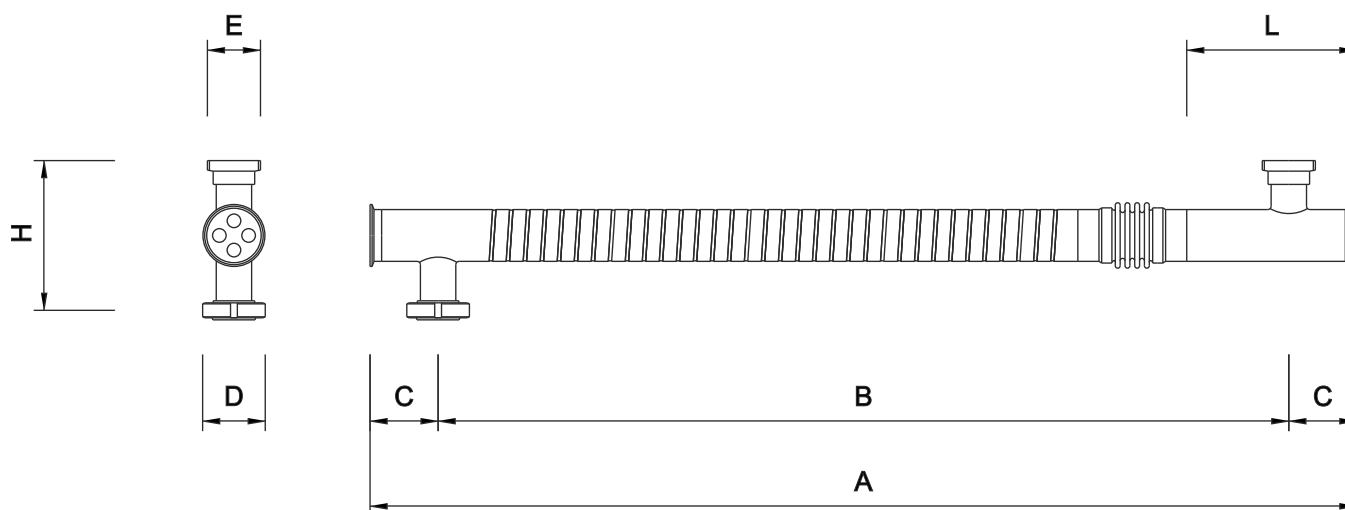
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 4 28 1 1000 | 3.36 | 1.79 | 0.32 | 3198.15 | 1963.50 | 11.8 |
| MLW 88 4 28 1 1500 | 4.96 | 2.77 | 0.50 | 3198.15 | 1963.50 | 15.9 |
| MLW 88 4 28 1 2000 | 6.56 | 3.75 | 0.67 | 3198.15 | 1963.50 | 20.0 |
| MLW 88 4 28 1 3000 | 9.76 | 5.71 | 1.02 | 3198.15 | 1963.50 | 28.2 |
| MLW 88 4 28 1 6000 | 19.35 | 11.60 | 2.08 | 3198.15 | 1963.50 | 52.7 |

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 | |
| MLW 88 4 28 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 88 4 28 1 1500 | Shell / Tubes | | | | | | | | | | 10.0 | | | |
| MLW 88 4 28 1 2000 | Shell / Tubes | | | | | | | 7.6 | | | | | | |
| MLW 88 4 28 1 3000 | Shell / Tubes | | | | | 5.1 | | | | 8.7 | | | | |
| MLW 88 4 28 1 6000 | Shell / Tubes | | 2.5 | | | 4.3 | | | | | | 10.3 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 4 28 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 4 28 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 4 28 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 4 28 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 4 28 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

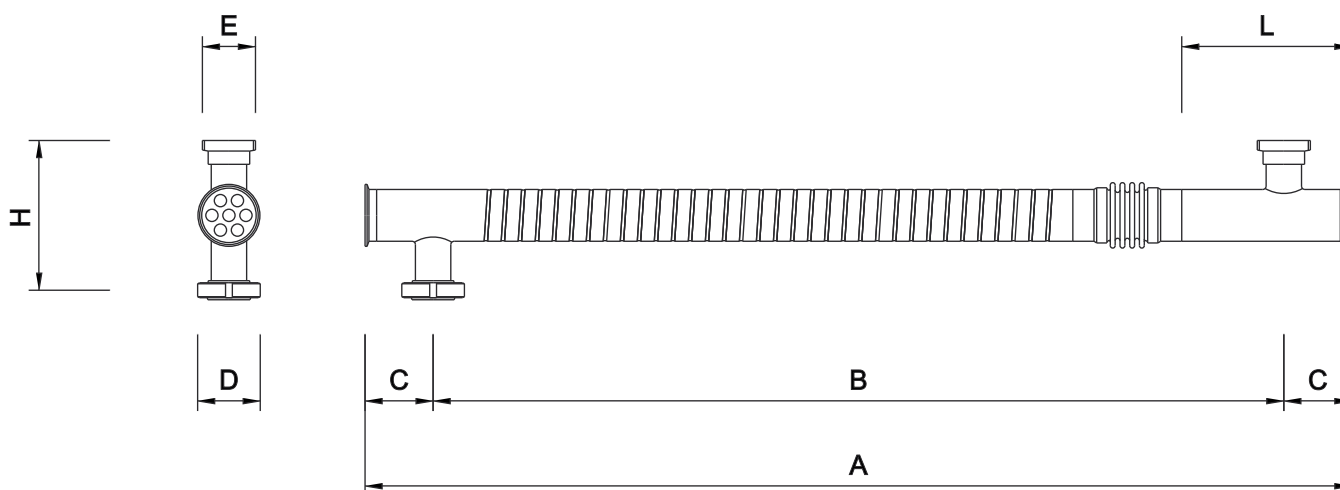
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 7 16 1 1000 | 4.32 | 0.98 | 0.32 | 4253.72 | 1077.57 | 10.6 |
| MLW 88 7 16 1 1500 | 6.45 | 1.52 | 0.50 | 4253.72 | 1077.57 | 14.0 |
| MLW 88 7 16 1 2000 | 8.57 | 2.06 | 0.67 | 4253.72 | 1077.57 | 17.5 |
| MLW 88 7 16 1 3000 | 12.83 | 3.14 | 1.02 | 4253.72 | 1077.57 | 24.3 |
| MLW 88 7 16 1 6000 | 25.59 | 6.37 | 2.08 | 4253.72 | 1077.57 | 44.9 |

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 | |
| MLW 88 7 16 1 1000 | Shell / Tubes | | | | | | | | | | | | 11.5 | |
| MLW 88 7 16 1 1500 | Shell / Tubes | | | | | | | 7.7 | | | | | | |
| MLW 88 7 16 1 2000 | Shell / Tubes | | | | | 5.8 | | | | | | | | |
| MLW 88 7 16 1 3000 | Shell / Tubes | | | 3.8 | | | | | | | | | | |
| MLW 88 7 16 1 6000 | Shell / Tubes | 1.9 | | | | | | | 7.8 | 7.8 | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 7 16 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 7 16 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 7 16 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 7 16 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 7 16 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

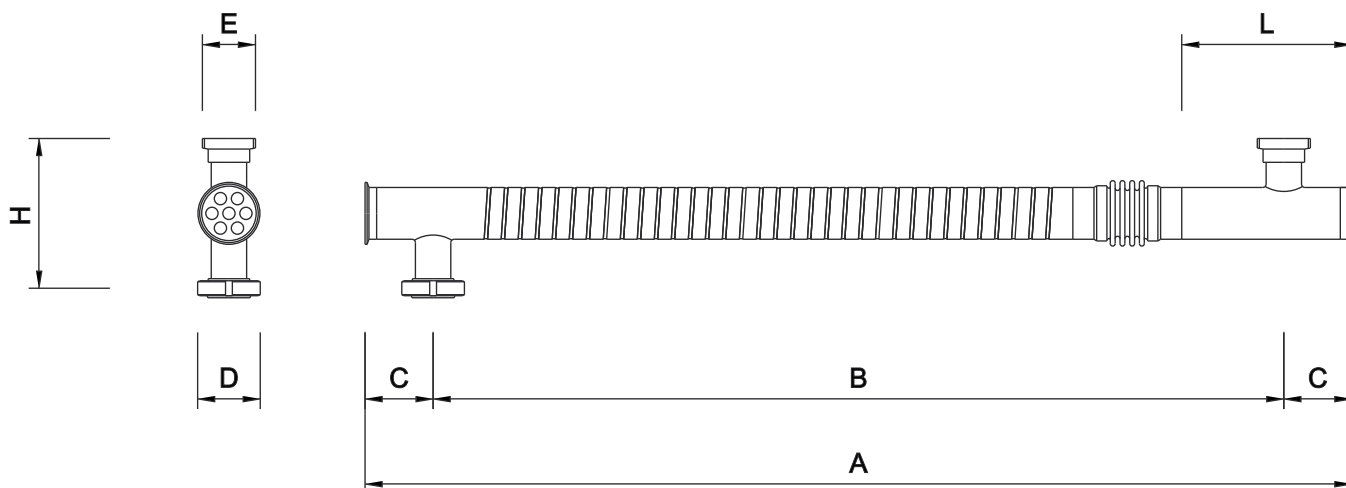
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 7 18 1 1000 | 3.98 | 1.28 | 0.36 | 3879.87 | 1407.43 | 10.9 |
| MLW 88 7 18 1 1500 | 5.92 | 1.98 | 0.56 | 3879.87 | 1407.43 | 14.5 |
| MLW 88 7 18 1 2000 | 7.86 | 2.69 | 0.76 | 3879.87 | 1407.43 | 18.1 |
| MLW 88 7 18 1 3000 | 11.74 | 4.10 | 1.15 | 3879.87 | 1407.43 | 25.3 |
| MLW 88 7 18 1 6000 | 23.38 | 8.32 | 2.34 | 3879.87 | 1407.43 | 46.9 |

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 | |
| MLW 88 7 18 1 1000 | Shell / Tubes | | | | | | | | | | | | | 12.5 |
| MLW 88 7 18 1 1500 | Shell / Tubes | | | | | | | | 8.4 | | | | | |
| MLW 88 7 18 1 2000 | Shell / Tubes | | | | | | 6.3 | | | | | | | |
| MLW 88 7 18 1 3000 | Shell / Tubes | | | | 4.2 | | | | | | | | | 12.1 |
| MLW 88 7 18 1 6000 | Shell / Tubes | | 2.1 | | | | | 6.0 | | 8.5 | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|---|---|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 7 18 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 250 |
| MLW 88 7 18 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 7 18 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 7 18 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 7 18 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

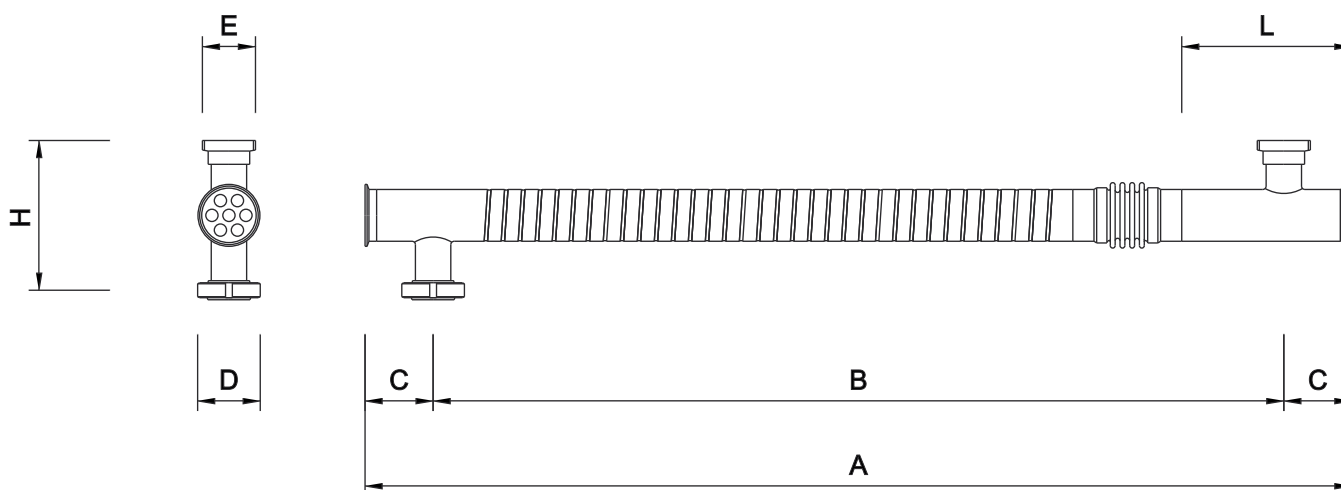
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 7 20 1 1000 | 3.60 | 1.62 | 0.40 | 3462.04 | 1781.28 | 11.2 |
| MLW 88 7 20 1 1500 | 5.33 | 2.51 | 0.62 | 3462.04 | 1781.28 | 15.0 |
| MLW 88 7 20 1 2000 | 7.06 | 3.40 | 0.84 | 3462.04 | 1781.28 | 18.8 |
| MLW 88 7 20 1 3000 | 10.52 | 5.18 | 1.28 | 3462.04 | 1781.28 | 26.3 |
| MLW 88 7 20 1 6000 | 20.91 | 10.53 | 2.60 | 3462.04 | 1781.28 | 49.0 |

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 | |
| MLW 88 7 20 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 88 7 20 1 1500 | Shell / Tubes | | | | | | | | | 9.3 | | | | |
| MLW 88 7 20 1 2000 | Shell / Tubes | | | | | | | 7.0 | | | | | | |
| MLW 88 7 20 1 3000 | Shell / Tubes | | | | 4.7 | | | | | | 9.6 | | | |
| MLW 88 7 20 1 6000 | Shell / Tubes | | 2.3 | | | 4.7 | | | | | 9.5 | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 7 20 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 7 20 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 7 20 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 7 20 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 7 20 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

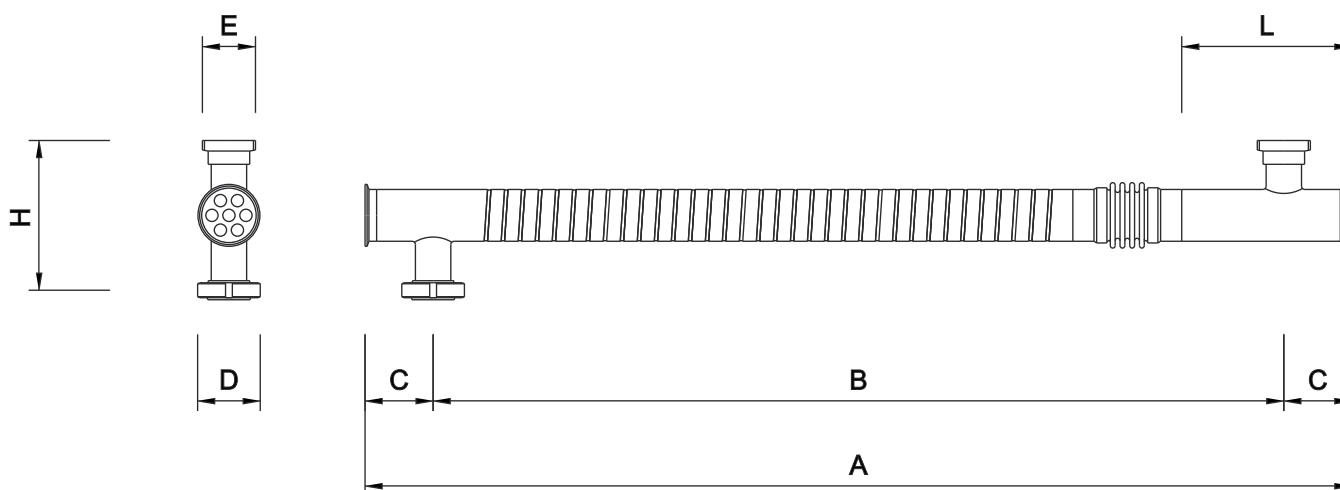
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|--------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 7 22 1 1000 | 3.18 | 2.00 | 0.44 | 3000.23 | 2199.11 | 11.6 |
| MLW 88 7 22 1 1500 | 4.68 | 3.10 | 0.68 | 3000.23 | 2199.11 | 15.5 |
| MLW 88 7 22 1 2000 | 6.18 | 4.20 | 0.92 | 3000.23 | 2199.11 | 19.4 |
| MLW 88 7 22 1 3000 | 9.18 | 6.40 | 1.41 | 3000.23 | 2199.11 | 27.3 |
| MLW 88 7 22 1 6000 | 18.18 | 13.00 | 2.86 | 3000.23 | 2199.11 | 51.0 |

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 | | | | |
| MLW 88 7 22 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | | |
| MLW 88 7 22 1 1500 | Shell / Tubes | | | | | | | | | | | | 10.6 | | | | |
| MLW 88 7 22 1 2000 | Shell / Tubes | | | | | | | | | 8.0 | | | | | 11.9 | | |
| MLW 88 7 22 1 3000 | Shell / Tubes | | | | | 5.4 | | | | 7.8 | | | | | | | |
| MLW 88 7 22 1 6000 | Shell / Tubes | | 2.7 | | 3.8 | | | | | | | | | | 11.0 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|--------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 7 22 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 7 22 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 7 22 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 7 22 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 7 22 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

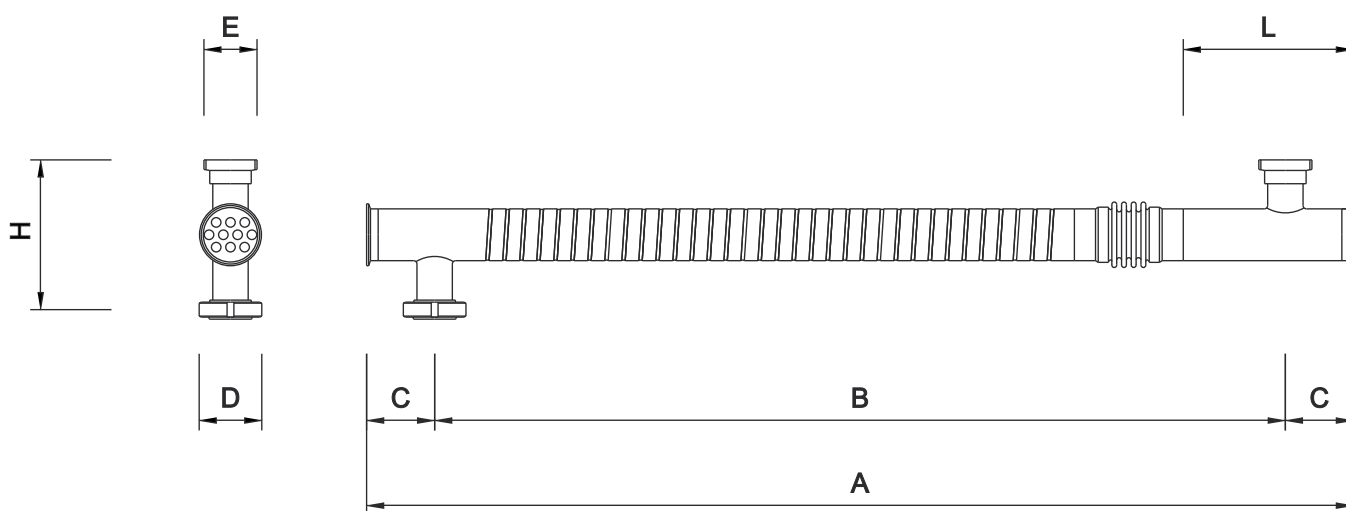
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-----------------------|-----------------------|---------------------------------|----------------------------------|----------------------------------|-------------|
| MLW 88 10 16 1 1000 | 3.77 | 1.40 | 0.46 | 3650.54 | 1539.38 | 11.6 |
| MLW 88 10 16 1 1500 | 5.60 | 2.17 | 0.71 | 3650.54 | 1539.38 | 15.6 |
| MLW 88 10 16 1 2000 | 7.42 | 2.94 | 0.96 | 3650.54 | 1539.38 | 19.6 |
| MLW 88 10 16 1 3000 | 11.07 | 4.48 | 1.46 | 3650.54 | 1539.38 | 27.5 |
| MLW 88 10 16 1 6000 | 22.02 | 9.10 | 2.97 | 3650.54 | 1539.38 | 51.4 |

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 | |
| MLW 88 10 16 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 88 10 16 1 1500 | Shell / Tubes | | | | | | | | 8.9 | | | | | |
| MLW 88 10 16 1 2000 | Shell / Tubes | | | | | | 6.7 | | | | | | | |
| MLW 88 10 16 1 3000 | Shell / Tubes | | | | 4.5 | | | | | | | | 11.1 | |
| MLW 88 10 16 1 6000 | Shell / Tubes | | 2.2 | | | | 5.4 | | | | 9 | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-----------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 10 16 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 10 16 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 10 16 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 10 16 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 10 16 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

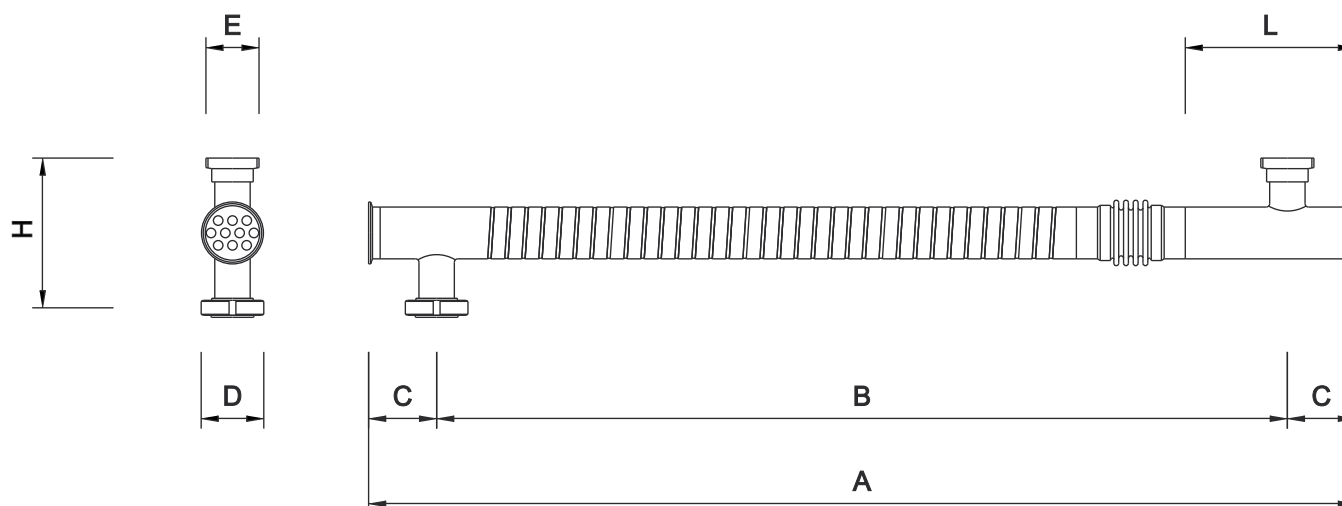
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 10 18 1 1000 | 3.28 | 1.83 | 0.51 | 3116.47 | 2010.62 | 12.1 |
| MLW 88 10 18 1 1500 | 4.84 | 2.83 | 0.80 | 3116.47 | 2010.62 | 16.3 |
| MLW 88 10 18 1 2000 | 6.40 | 3.84 | 1.08 | 3116.47 | 2010.62 | 20.5 |
| MLW 88 10 18 1 3000 | 9.52 | 5.85 | 1.65 | 3116.47 | 2010.62 | 29.0 |
| MLW 88 10 18 1 6000 | 18.87 | 11.88 | 3.34 | 3116.47 | 2010.62 | 54.3 |

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 | | | | |
| MLW 88 10 18 1 1000 | Shell / Tubes | | | | | | | | | | | | | | | | |
| MLW 88 10 18 1 1500 | Shell / Tubes | | | | | | | | | | 10.3 | | | | | | |
| MLW 88 10 18 1 2000 | Shell / Tubes | | | | | | | 7.8 | | | | | | | | | |
| MLW 88 10 18 1 3000 | Shell / Tubes | | | | | 5.2 | | | | 8.5 | | | | | | | |
| MLW 88 10 18 1 6000 | Shell / Tubes | | 2.6 | | | 4.2 | | | | | | 10.5 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 10 18 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 250 |
| MLW 88 10 18 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 10 18 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 10 18 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 10 18 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

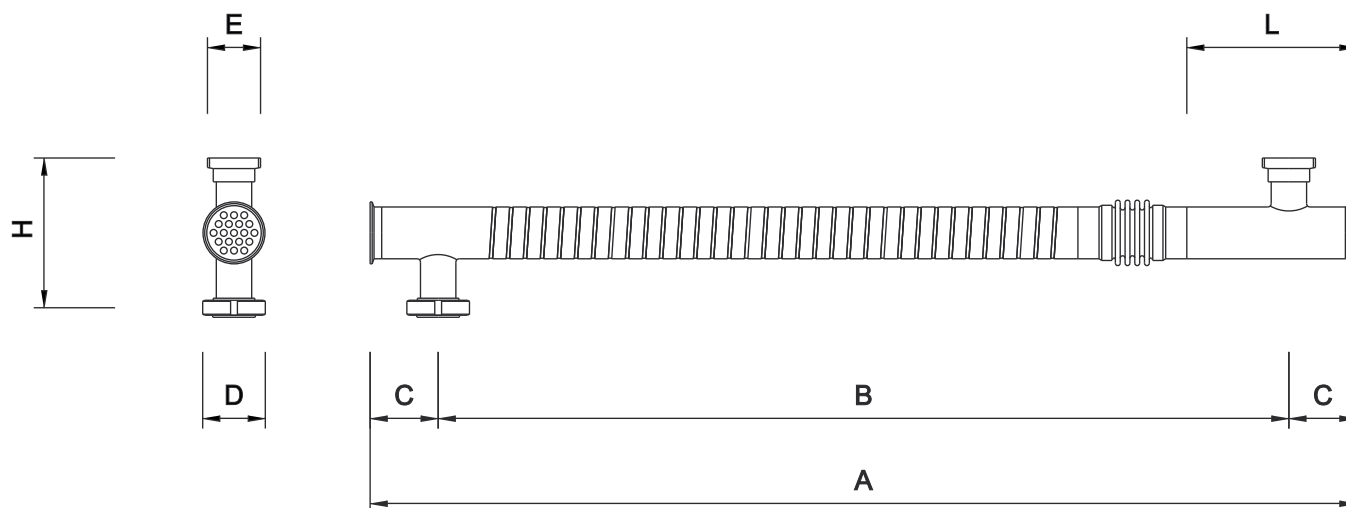
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 88 19 12 1 1000 | 3.64 | 1.36 | 0.65 | 3512.31 | 1492.26 | 13.0 |
| MLW 88 19 12 1 1500 | 5.40 | 2.10 | 1.01 | 3512.31 | 1492.26 | 17.7 |
| MLW 88 19 12 1 2000 | 7.16 | 2.85 | 1.37 | 3512.31 | 1492.26 | 22.4 |
| MLW 88 19 12 1 3000 | 10.67 | 4.34 | 2.08 | 3512.31 | 1492.26 | 31.8 |
| MLW 88 19 12 1 6000 | 21.21 | 8.82 | 4.23 | 3512.31 | 1492.26 | 60.0 |

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 | |
| MLW 88 19 12 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 88 19 12 1 1500 | Shell / Tubes | | | | | | | | | 9.2 | | | | |
| MLW 88 19 12 1 2000 | Shell / Tubes | | | | | | 6.9 | | | | | | | |
| MLW 88 19 12 1 3000 | Shell / Tubes | | | | 4.6 | | | | | | | | 11.5 | |
| MLW 88 19 12 1 6000 | Shell / Tubes | | 2.3 | | | | 5.6 | | | | 9.4 | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-----|
| | A | B | C | D | E | H | L |
| MLW 88 19 12 1 1000 | 950 | 750 | 100 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 250 |
| MLW 88 19 12 1 1500 | 1450 | 1250 | | | | | |
| MLW 88 19 12 1 2000 | 1950 | 1750 | | | | | |
| MLW 88 19 12 1 3000 | 2950 | 2750 | | | | | |
| MLW 88 19 12 1 6000 | 5950 | 5750 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

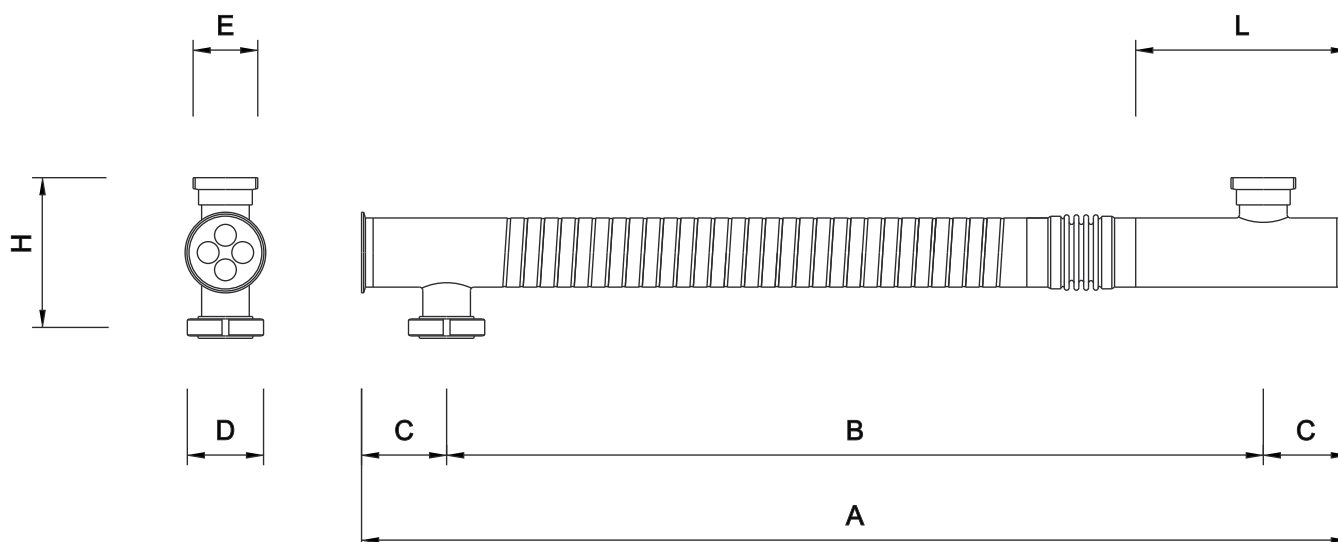
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 4 25 1 1000 | 5.57 | 1.43 | 0.29 | 5454.68 | 1576.33 | 13.4 |
| MLW 100 4 25 1 1500 | 8.30 | 2.22 | 0.45 | 5454.68 | 1576.33 | 17.6 |
| MLW 100 4 25 1 2000 | 11.03 | 3.01 | 0.61 | 5454.68 | 1576.33 | 21.8 |
| MLW 100 4 25 1 3000 | 16.48 | 4.59 | 0.93 | 5454.68 | 1576.33 | 30.2 |
| MLW 100 4 25 1 6000 | 32.85 | 9.32 | 1.89 | 5454.68 | 1576.33 | 55.5 |

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 | |
| MLW 100 4 25 1 1000 | Shell / Tubes | | | | | | | | 8.9 | | | | | |
| MLW 100 4 25 1 1500 | Shell / Tubes | | | | | | 6.0 | | | | | | | |
| MLW 100 4 25 1 2000 | Shell / Tubes | | | | | 4.5 | | | | | | | | |
| MLW 100 4 25 1 3000 | Shell / Tubes | | | 3.0 | | | | | | | | 10.8 | | 12.1 |
| MLW 100 4 25 1 6000 | Shell / Tubes | 1.5 | | | | | 5.3 | 6.0 | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 4 25 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 312.5 |
| MLW 100 4 25 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 4 25 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 4 25 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 4 25 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

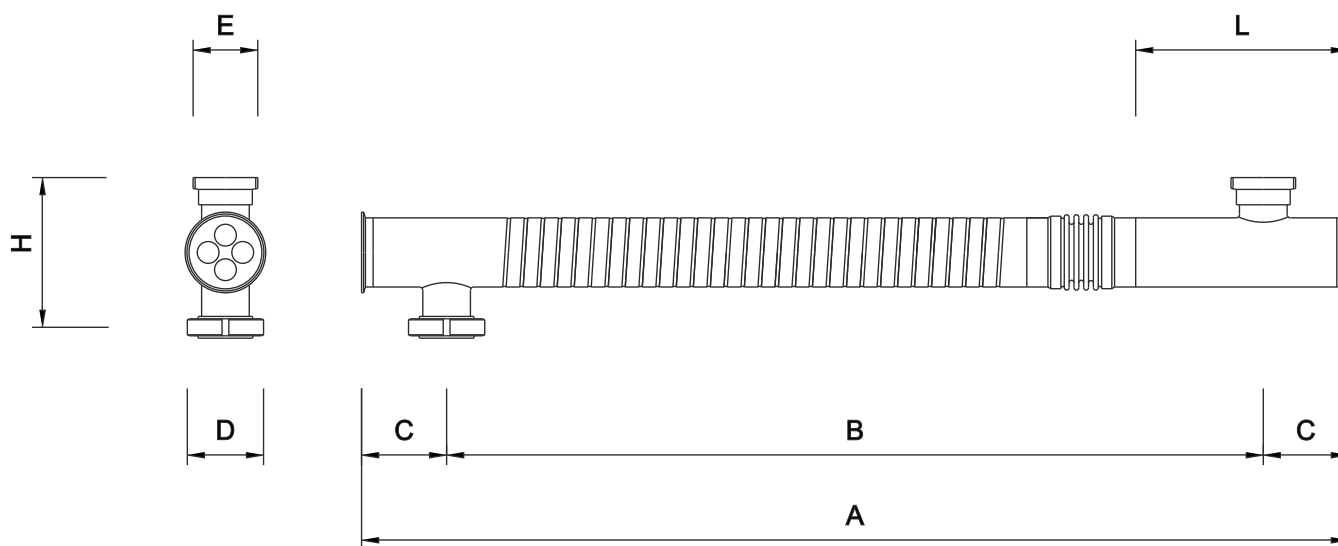
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 4 28 1 1000 | 5.18 | 1.79 | 0.32 | 5018.51 | 1963.50 | 13.7 |
| MLW 100 4 28 1 1500 | 7.69 | 2.77 | 0.50 | 5018.51 | 1963.50 | 18.1 |
| MLW 100 4 28 1 2000 | 10.20 | 3.75 | 0.67 | 5018.51 | 1963.50 | 22.5 |
| MLW 100 4 28 1 3000 | 15.21 | 5.71 | 1.02 | 5018.51 | 1963.50 | 31.3 |
| MLW 100 4 28 1 6000 | 30.27 | 11.60 | 2.08 | 5018.51 | 1963.50 | 57.7 |

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 |
| MLW 100 4 28 1 1000 | Shell / Tubes | | | | | | | | | 9.6 | | | |
| MLW 100 4 28 1 1500 | Shell / Tubes | | | | | | 6.5 | | | | | | |
| MLW 100 4 28 1 2000 | Shell / Tubes | | | | 4.9 | | | | | | | | |
| MLW 100 4 28 1 3000 | Shell / Tubes | | | 3.2 | | | | | | 8.7 | | | |
| MLW 100 4 28 1 6000 | Shell / Tubes | 1.6 | | | | 4.3 | | 6.6 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 4 28 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 312.5 |
| MLW 100 4 28 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 4 28 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 4 28 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 4 28 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

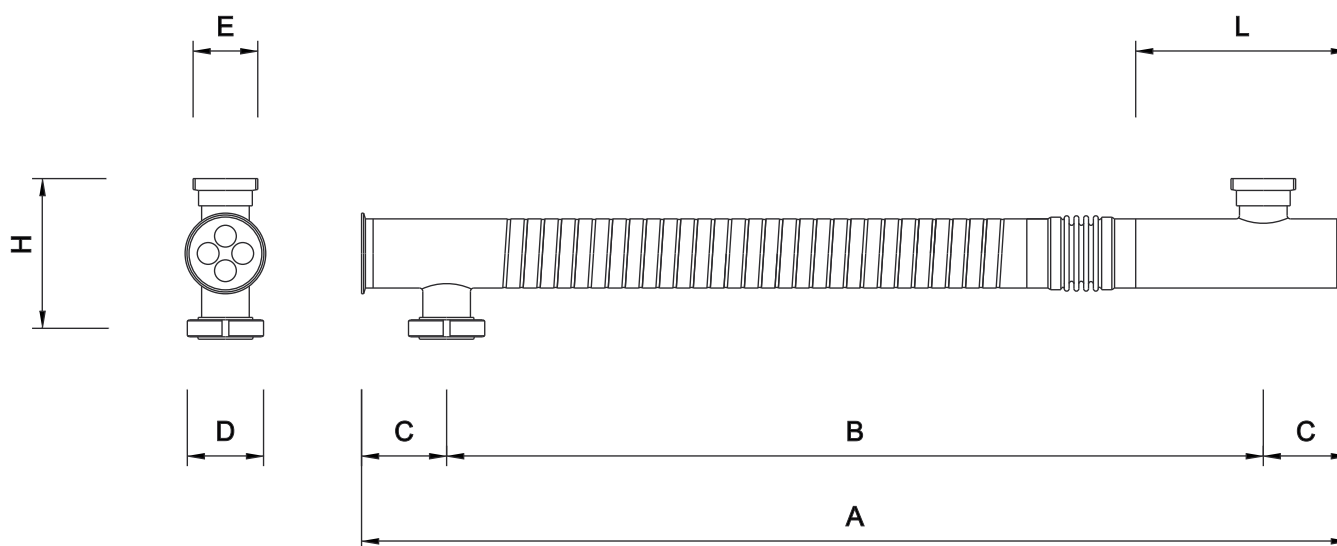
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 4 34 1 1000 | 4.11 | 2.75 | 0.39 | 3849.83 | 3019.07 | 14.5 |
| MLW 100 4 34 1 1500 | 6.04 | 4.26 | 0.60 | 3849.83 | 3019.07 | 19.4 |
| MLW 100 4 34 1 2000 | 7.96 | 5.77 | 0.82 | 3849.83 | 3019.07 | 24.2 |
| MLW 100 4 34 1 3000 | 11.81 | 8.79 | 1.24 | 3849.83 | 3019.07 | 33.9 |
| MLW 100 4 34 1 6000 | 23.36 | 17.84 | 2.53 | 3849.83 | 3019.07 | 63.0 |

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 | |
| MLW 100 4 34 1 1000 | Shell / Tubes | | | | | | | | | | | | | 12.1 |
| MLW 100 4 34 1 1500 | Shell / Tubes | | | | | | | | 8.2 | | | | 11.7 | |
| MLW 100 4 34 1 2000 | Shell / Tubes | | | | | | 6.2 | | 8.6 | | | | | |
| MLW 100 4 34 1 3000 | Shell / Tubes | | | | 4.2 | | 5.6 | | | | | | | |
| MLW 100 4 34 1 6000 | Shell / Tubes | | 2.1 | 2.8 | | | | | | 8.5 | | | 11.2 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 4 34 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 312.5 |
| MLW 100 4 34 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 4 34 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 4 34 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 4 34 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

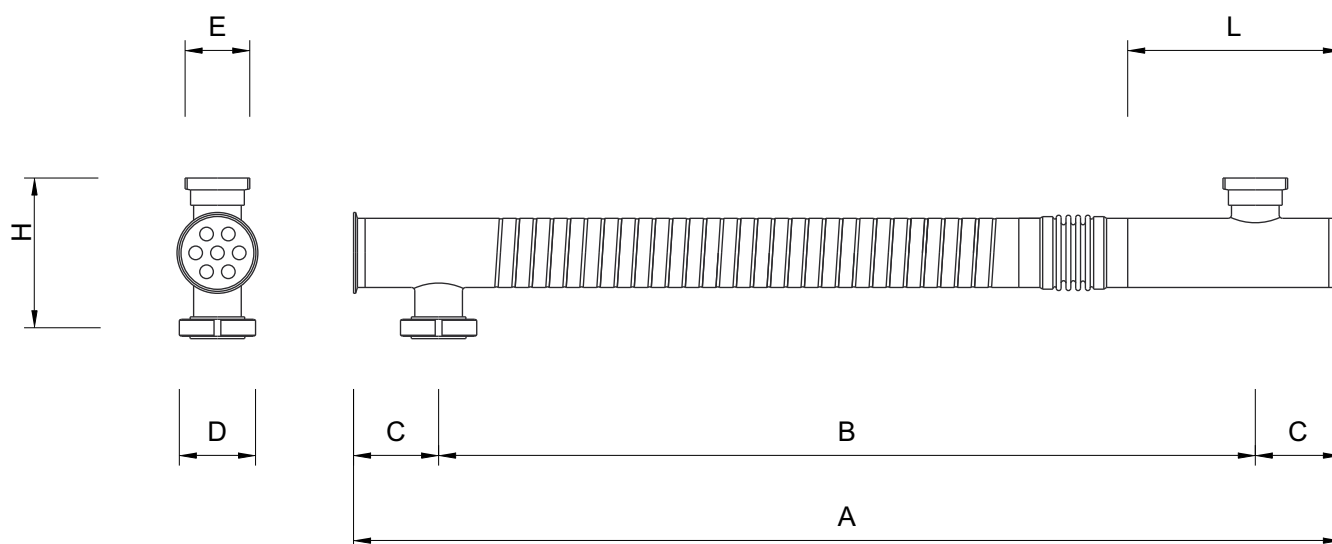
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 7 22 1 1000 | 5.00 | 1.81 | 0.44 | 4820.59 | 1984.70 | 15.0 |
| MLW 100 7 22 1 1500 | 7.41 | 2.80 | 0.68 | 4820.59 | 1984.70 | 20.1 |
| MLW 100 7 22 1 2000 | 9.82 | 3.79 | 0.92 | 4820.59 | 1984.70 | 25.2 |
| MLW 100 7 22 1 3000 | 14.64 | 5.78 | 1.41 | 4820.59 | 1984.70 | 35.4 |
| MLW 100 7 22 1 6000 | 29.10 | 11.73 | 2.86 | 4820.59 | 1984.70 | 65.9 |

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 |
| MLW 100 7 22 1 1000 | Shell / Tubes | | | | | | | | | | 10.0 | | |
| MLW 100 7 22 1 1500 | Shell / Tubes | | | | | | 6.7 | | | | | | |
| MLW 100 7 22 1 2000 | Shell / Tubes | | | | | 5.0 | | | | | | | |
| MLW 100 7 22 1 3000 | Shell / Tubes | | | 3.4 | | | | | | 8.6 | | | |
| MLW 100 7 22 1 6000 | Shell / Tubes | 1.7 | | | | 4.2 | | 6.8 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 7 22 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 312.5 |
| MLW 100 7 22 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 7 22 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 7 22 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 7 22 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

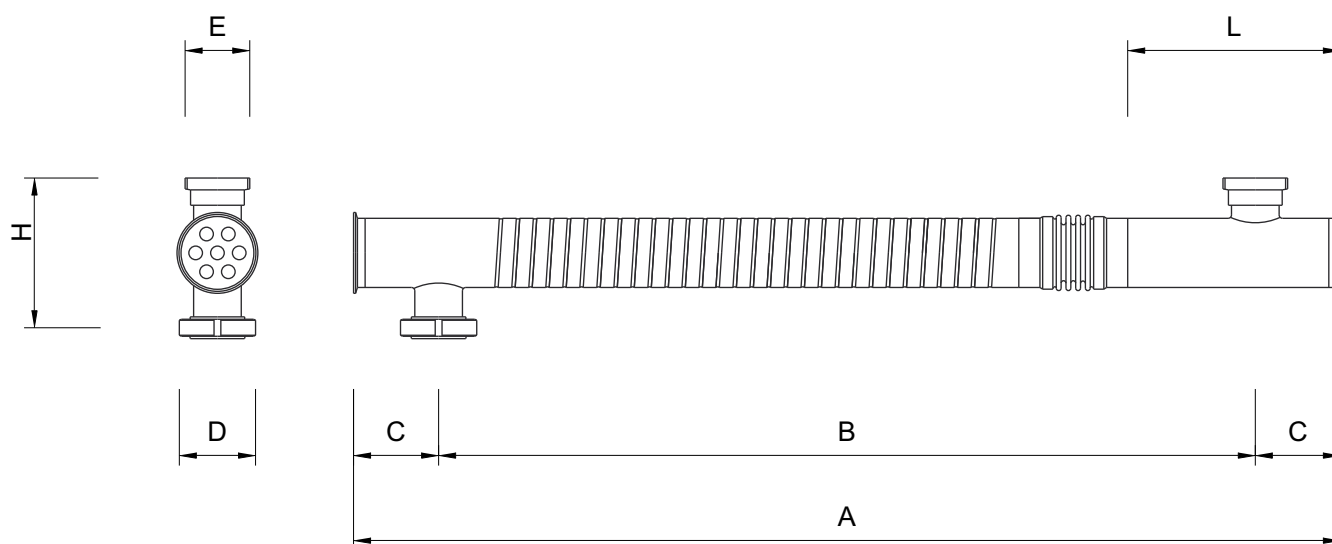
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 7 25 1 1000 | 4.19 | 2.51 | 0.51 | 3934.56 | 2758.57 | 15.8 |
| MLW 100 7 25 1 1500 | 6.16 | 3.89 | 0.79 | 3934.56 | 2758.57 | 21.3 |
| MLW 100 7 25 1 2000 | 8.13 | 5.27 | 1.07 | 3934.56 | 2758.57 | 26.9 |
| MLW 100 7 25 1 3000 | 12.06 | 8.03 | 1.63 | 3934.56 | 2758.57 | 37.9 |
| MLW 100 7 25 1 6000 | 23.86 | 16.30 | 3.30 | 3934.56 | 2758.57 | 71.1 |

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 | |
| MLW 100 7 25 1 1000 | Shell / Tubes | | | | | | | | | 11.9 | | | | |
| MLW 100 7 25 1 1500 | Shell / Tubes | | | | | | | | 8.1 | | | | | 12.8 |
| MLW 100 7 25 1 2000 | Shell / Tubes | | | | | | 6.1 | | | 9.4 | | | | |
| MLW 100 7 25 1 3000 | Shell / Tubes | | | | 4.1 | | | 6.2 | | | | | | |
| MLW 100 7 25 1 6000 | Shell / Tubes | | 2.0 | | 3.0 | | | | | 8.3 | | | | 12.2 |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 7 25 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 312.5 |
| MLW 100 7 25 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 7 25 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 7 25 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 7 25 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

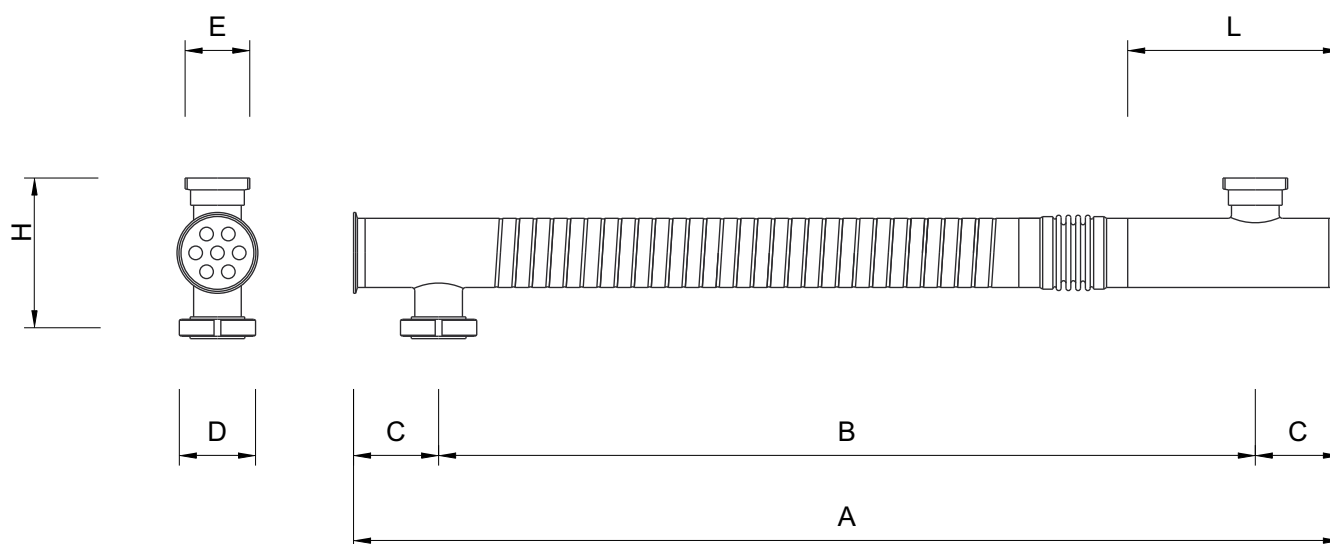
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 7 28 1 1000 | 3.50 | 3.13 | 0.56 | 3171.25 | 3436.12 | 16.4 |
| MLW 100 7 28 1 1500 | 5.08 | 4.84 | 0.87 | 3171.25 | 3436.12 | 22.3 |
| MLW 100 7 28 1 2000 | 6.67 | 6.56 | 1.18 | 3171.25 | 3436.12 | 28.2 |
| MLW 100 7 28 1 3000 | 9.84 | 10.00 | 1.79 | 3171.25 | 3436.12 | 39.9 |
| MLW 100 7 28 1 6000 | 19.35 | 20.31 | 3.64 | 3171.25 | 3436.12 | 75.1 |

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 | |
| MLW 100 7 28 1 1000 | Shell / Tubes | | | | | | | | | | | | | |
| MLW 100 7 28 1 1500 | Shell / Tubes | | | | | | | | | 9.8 | | 10.3 | | |
| MLW 100 7 28 1 2000 | Shell / Tubes | | | | | | | 7.4 | 7.6 | | | | | |
| MLW 100 7 28 1 3000 | Shell / Tubes | | | | | 5.0 | 5.0 | | | | | | | |
| MLW 100 7 28 1 6000 | Shell / Tubes | | 2.5 | 2.4 | | | | | | | 9.8 | 10.3 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 7 28 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" | DIN 11851 DN 50-65 M/F CLAMP 3" | 220 | 312.5 |
| MLW 100 7 28 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 7 28 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 7 28 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 7 28 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

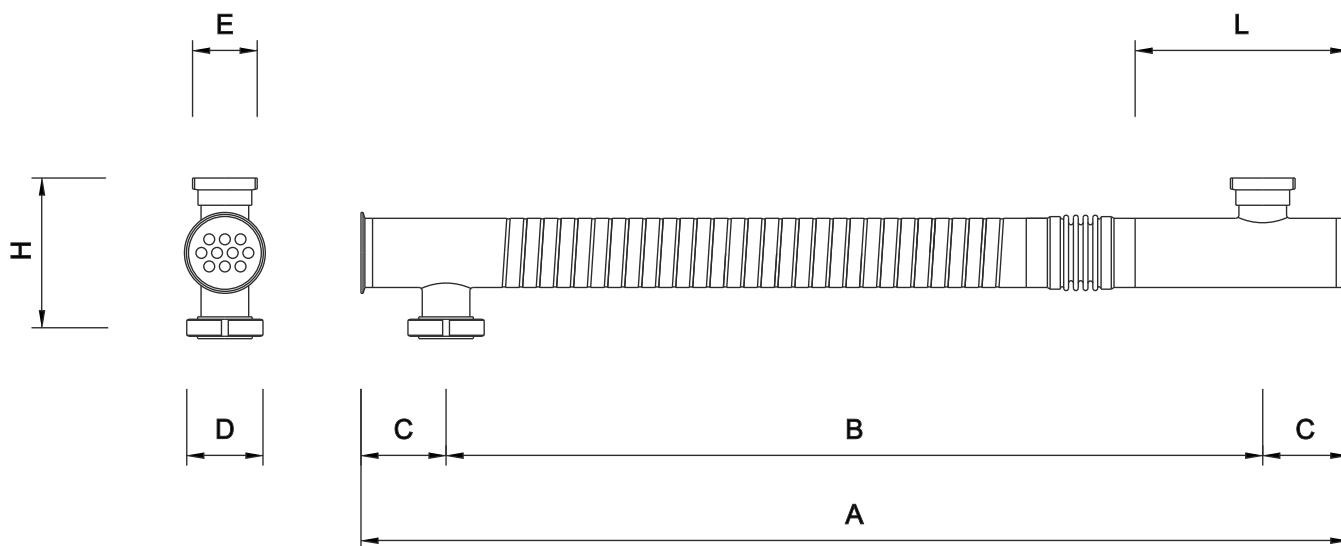
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 10 16 1 1000 | 5.59 | 1.40 | 0.46 | 5470.90 | 1539.38 | 13.5 |
| MLW 100 10 16 1 1500 | 8.32 | 2.17 | 0.71 | 5470.90 | 1539.38 | 17.8 |
| MLW 100 10 16 1 2000 | 11.06 | 2.94 | 0.96 | 5470.90 | 1539.38 | 22.1 |
| MLW 100 10 16 1 3000 | 16.53 | 4.48 | 1.46 | 5470.90 | 1539.38 | 30.7 |
| MLW 100 10 16 1 6000 | 32.94 | 9.10 | 2.97 | 5470.90 | 1539.38 | 56.4 |

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 | |
| MLW 100 10 16 1 1000 | Shell / Tubes | | | | | | | | 8.9 | | | | | |
| MLW 100 10 16 1 1500 | Shell / Tubes | | | | | | 6.0 | | | | | | | |
| MLW 100 10 16 1 2000 | Shell / Tubes | | | | | 4.5 | | | | | | | | |
| MLW 100 10 16 1 3000 | Shell / Tubes | | | 3.0 | | | | | | | | | 11.1 | 12.0 |
| MLW 100 10 16 1 6000 | Shell / Tubes | 1.5 | | | | | 5.4 | 6.0 | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 10 16 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 312.5 |
| MLW 100 10 16 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 10 16 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 10 16 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 10 16 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

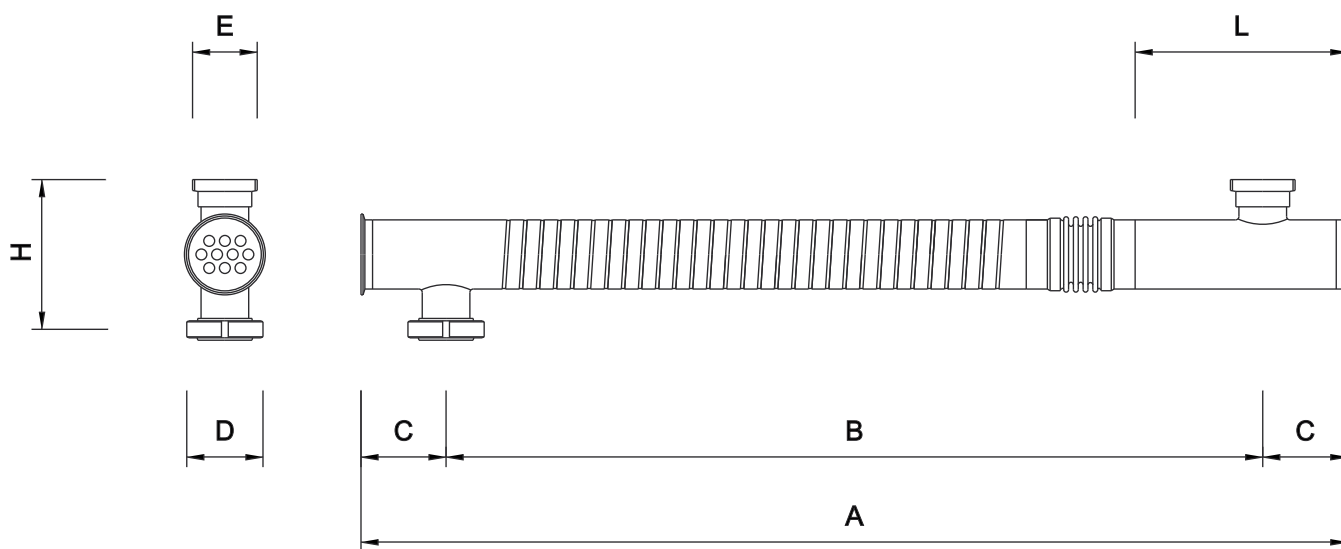
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 10 18 1 1000 | 5.10 | 1.83 | 0.51 | 4936.82 | 2010.62 | 14.0 |
| MLW 100 10 18 1 1500 | 7.57 | 2.83 | 0.80 | 4936.82 | 2010.62 | 18.5 |
| MLW 100 10 18 1 2000 | 10.04 | 3.84 | 1.08 | 4936.82 | 2010.62 | 23.1 |
| MLW 100 10 18 1 3000 | 14.98 | 5.85 | 1.65 | 4936.82 | 2010.62 | 32.1 |
| MLW 100 10 18 1 6000 | 29.79 | 11.88 | 3.34 | 4936.82 | 2010.62 | 59.3 |

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 |
| MLW 100 10 18 1 1000 | Shell / Tubes | | | | | | | | | 9.8 | | | |
| MLW 100 10 18 1 1500 | Shell / Tubes | | | | | | 6.6 | | | | | | |
| MLW 100 10 18 1 2000 | Shell / Tubes | | | | 4.9 | | | | | | | | |
| MLW 100 10 18 1 3000 | Shell / Tubes | | | 3.3 | | | | | | 8.5 | | | |
| MLW 100 10 18 1 6000 | Shell / Tubes | 1.6 | | | | 4.2 | | 6.7 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 10 18 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 312.5 |
| MLW 100 10 18 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 10 18 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 10 18 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 10 18 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

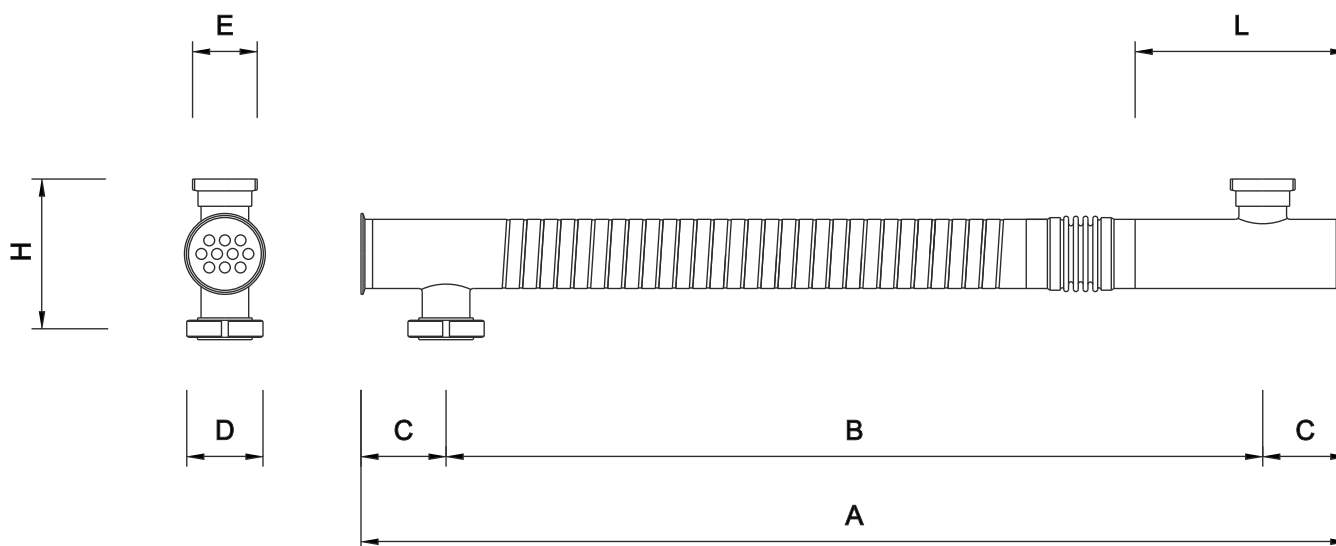
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 10 20 1 1000 | 4.56 | 2.32 | 0.57 | 4339.92 | 2544.69 | 14.4 |
| MLW 100 10 20 1 1500 | 6.73 | 3.59 | 0.89 | 4339.92 | 2544.69 | 19.2 |
| MLW 100 10 20 1 2000 | 8.90 | 4.86 | 1.20 | 4339.92 | 2544.69 | 24.0 |
| MLW 100 10 20 1 3000 | 13.24 | 7.41 | 1.83 | 4339.92 | 2544.69 | 33.6 |
| MLW 100 10 20 1 6000 | 26.26 | 15.04 | 3.71 | 4339.92 | 2544.69 | 62.3 |

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 | | | |
| MLW 100 10 20 1 1000 | Shell / Tubes | | | | | | | | | | | | 10.9 | | | |
| MLW 100 10 20 1 1500 | Shell / Tubes | | | | | | | | 7.4 | | | | | | | |
| MLW 100 10 20 1 2000 | Shell / Tubes | | | | | 5.6 | | | | | | | 10.2 | | | |
| MLW 100 10 20 1 3000 | Shell / Tubes | | | 3.7 | | | | 6.7 | | | | | | | | |
| MLW 100 10 20 1 6000 | Shell / Tubes | 1.9 | | | 3.3 | | | | 7.6 | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 10 20 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 312.5 |
| MLW 100 10 20 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 10 20 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 10 20 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 10 20 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

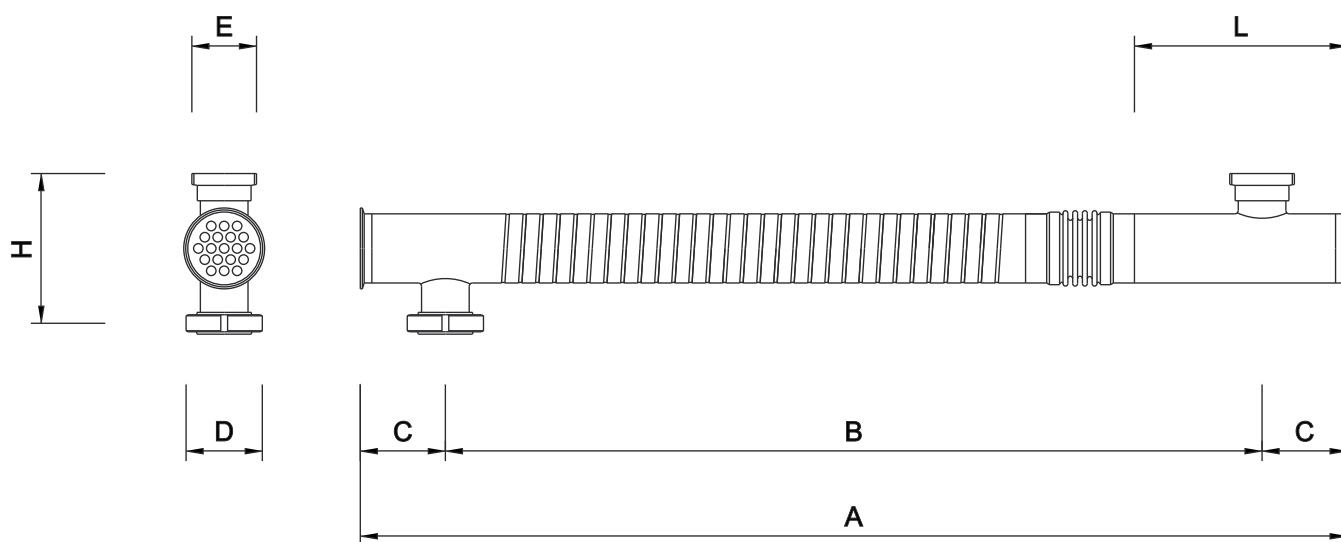
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 100 19 16 1 1000 | 3.94 | 2.66 | 0.87 | 3661.34 | 2924.82 | 16.6 |
| MLW 100 19 16 1 1500 | 5.77 | 4.12 | 1.35 | 3661.34 | 2924.82 | 22.5 |
| MLW 100 19 16 1 2000 | 7.60 | 5.59 | 1.82 | 3661.34 | 2924.82 | 28.5 |
| MLW 100 19 16 1 3000 | 11.26 | 8.51 | 2.78 | 3661.34 | 2924.82 | 40.4 |
| MLW 100 19 16 1 6000 | 22.25 | 17.29 | 5.64 | 3661.34 | 2924.82 | 76.1 |

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 | |
| MLW 100 19 16 1 1000 | Shell / Tubes | | | | | | | | | | | | | 12.6 |
| MLW 100 19 16 1 1500 | Shell / Tubes | | | | | | | | 8.6 | | | | | 12.1 |
| MLW 100 19 16 1 2000 | Shell / Tubes | | | | | | 6.5 | | 8.9 | | | | | |
| MLW 100 19 16 1 3000 | Shell / Tubes | | | | 4.4 | | 5.8 | | | | | | | |
| MLW 100 19 16 1 6000 | Shell / Tubes | | 2.2 | 2.8 | | | | | 8.9 | | | | 11.5 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 100 19 16 1 1000 | 950 | 700 | 125 | DIN 11851 DN 100 F CLAMP 4" more connections on demand | DIN 11851 DN 50-65 M/F CLAMP 3" more connections on demand | 220 | 312.5 |
| MLW 100 19 16 1 1500 | 1450 | 1200 | | | | | |
| MLW 100 19 16 1 2000 | 1950 | 1700 | | | | | |
| MLW 100 19 16 1 3000 | 2950 | 2700 | | | | | |
| MLW 100 19 16 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

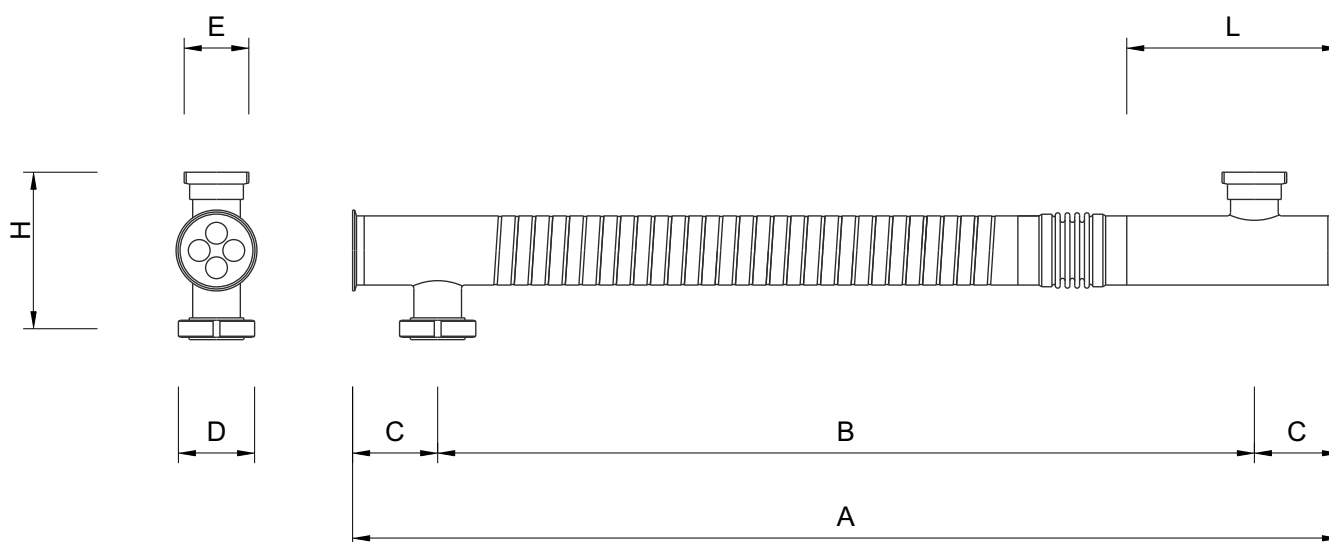
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 4 28 1 1000 | 7.05 | 1.79 | 0.32 | 7092.22 | 1963.50 | 15.8 |
| MLW 114 4 28 1 1500 | 10.60 | 2.77 | 0.50 | 7092.22 | 1963.50 | 20.5 |
| MLW 114 4 28 1 2000 | 14.14 | 3.75 | 0.67 | 7092.22 | 1963.50 | 25.2 |
| MLW 114 4 28 1 3000 | 21.23 | 5.71 | 1.02 | 7092.22 | 1963.50 | 34.7 |
| MLW 114 4 28 1 6000 | 42.51 | 11.60 | 2.08 | 7092.22 | 1963.50 | 62.9 |

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 | |
| MLW 114 4 28 1 1000 | Shell / Tubes | | | | | | | 7.0 | | | | | | |
| MLW 114 4 28 1 1500 | Shell / Tubes | | | | 4.7 | | | | | | | | | |
| MLW 114 4 28 1 2000 | Shell / Tubes | | | 3.5 | | | | | | | | | | |
| MLW 114 4 28 1 3000 | Shell / Tubes | | 2.3 | | | | | | | 8.7 | 9.4 | | | |
| MLW 114 4 28 1 6000 | Shell / Tubes | 1.1 | | | 4.7 | 4.3 | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 4 28 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" | DIN 11851 DN 65-80 M/F CLAMP 3" | 230 | 312.5 |
| MLW 114 4 28 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 4 28 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 4 28 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 4 28 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

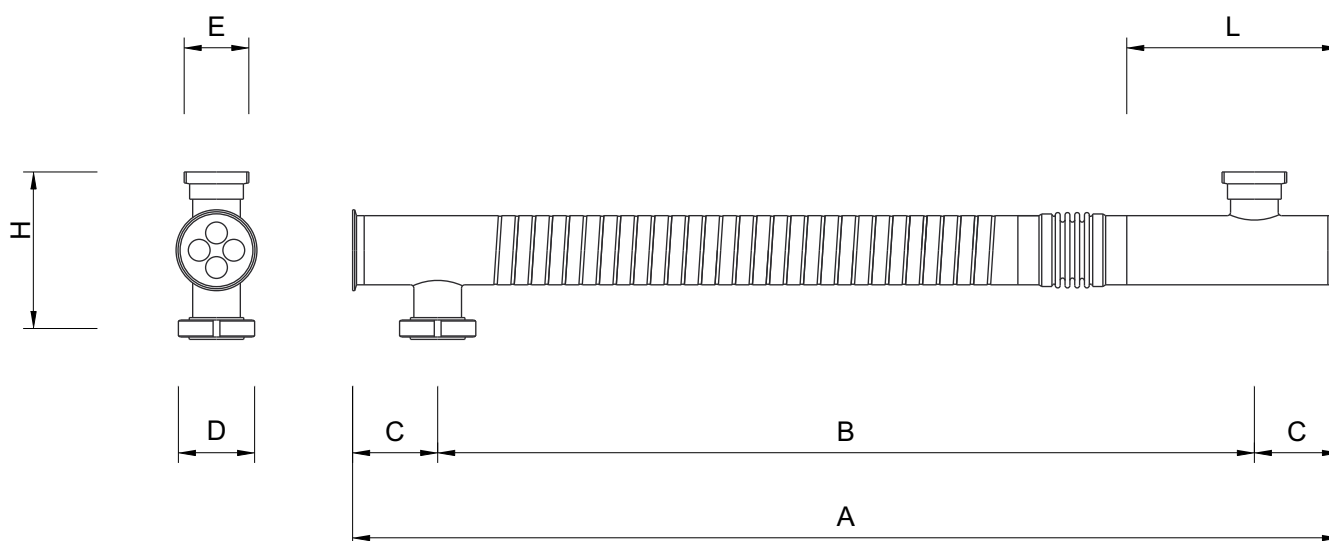
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 4 34 1 1000 | 5.99 | 2.75 | 0.39 | 5923.54 | 3019.07 | 16.6 |
| MLW 114 4 34 1 1500 | 8.95 | 4.26 | 0.60 | 5923.54 | 3019.07 | 21.8 |
| MLW 114 4 34 1 2000 | 11.91 | 5.77 | 0.82 | 5923.54 | 3019.07 | 26.9 |
| MLW 114 4 34 1 3000 | 17.83 | 8.79 | 1.24 | 5923.54 | 3019.07 | 37.2 |
| MLW 114 4 34 1 6000 | 35.60 | 17.84 | 2.53 | 5923.54 | 3019.07 | 68.2 |

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 | | | | |
| MLW 114 4 34 1 1000 | Shell / Tubes | | | | | | | | 8.3 | | | | | | | | |
| MLW 114 4 34 1 1500 | Shell / Tubes | | | | | 5.5 | | | | | | | | | 11.7 | | |
| MLW 114 4 34 1 2000 | Shell / Tubes | | | | 4.1 | | | | | 8.6 | | | | | | | |
| MLW 114 4 34 1 3000 | Shell / Tubes | | 2.8 | | | | 5.6 | | | | | | | | 11.2 | | |
| MLW 114 4 34 1 6000 | Shell / Tubes | 1.4 | | 2.8 | | | 5.6 | | | | | | | | 11.2 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 4 34 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" more connections on demand | DIN 11851 DN 65-80 M/F CLAMP 3" more connections on demand | 230 | 312.5 |
| MLW 114 4 34 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 4 34 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 4 34 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 4 34 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

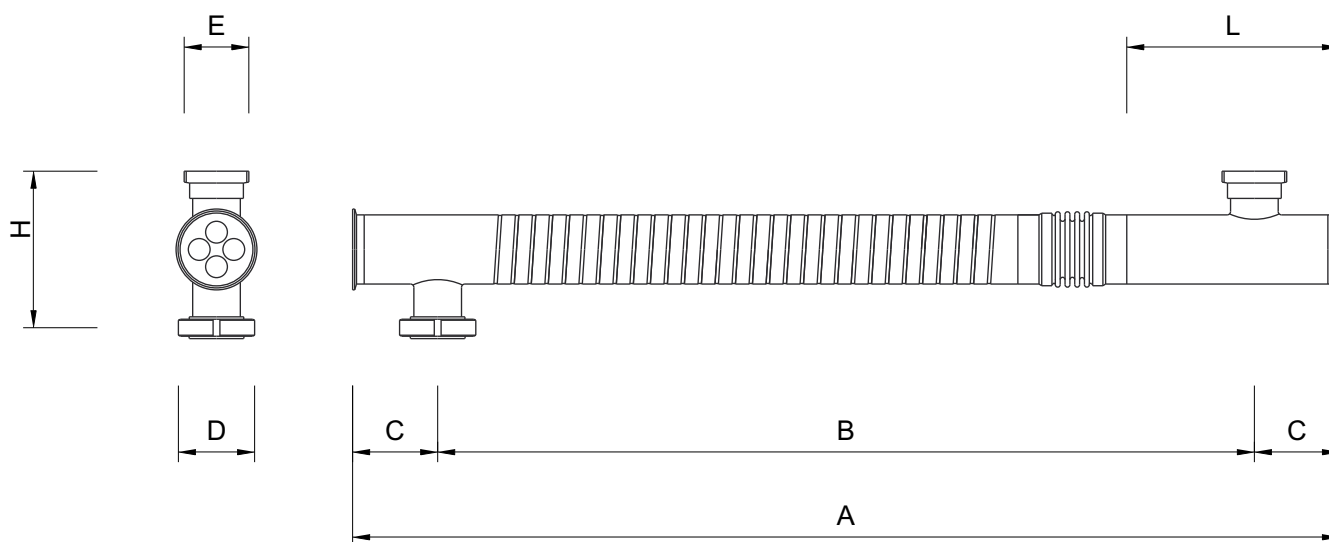
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 4 40 1 1000 | 4.72 | 3.91 | 0.46 | 4528.68 | 4300.84 | 17.4 |
| MLW 114 4 40 1 1500 | 6.98 | 6.06 | 0.71 | 4528.68 | 4300.84 | 23.0 |
| MLW 114 4 40 1 2000 | 9.25 | 8.21 | 0.96 | 4528.68 | 4300.84 | 28.6 |
| MLW 114 4 40 1 3000 | 13.77 | 12.52 | 1.46 | 4528.68 | 4300.84 | 39.8 |
| MLW 114 4 40 1 6000 | 27.36 | 25.42 | 2.97 | 4528.68 | 4300.84 | 73.4 |

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 | |
| MLW 114 4 40 1 1000 | Shell / Tubes | | | | | | | | | | | 10,5 | | 12,7 |
| MLW 114 4 40 1 1500 | Shell / Tubes | | | | | | | 7,1 | | 8,2 | | | | |
| MLW 114 4 40 1 2000 | Shell / Tubes | | | | | 5,4 | | 6,0 | | | | | | |
| MLW 114 4 40 1 3000 | Shell / Tubes | | | 3,6 | 3,9 | | | | | | | | | |
| MLW 114 4 40 1 6000 | Shell / Tubes | 1,8 | 1,9 | | | | | | 7,3 | 7,8 | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 4 40 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" | DIN 11851 DN 65-80 M/F CLAMP 3" | 230 | 312.5 |
| MLW 114 4 40 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 4 40 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 4 40 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 4 40 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

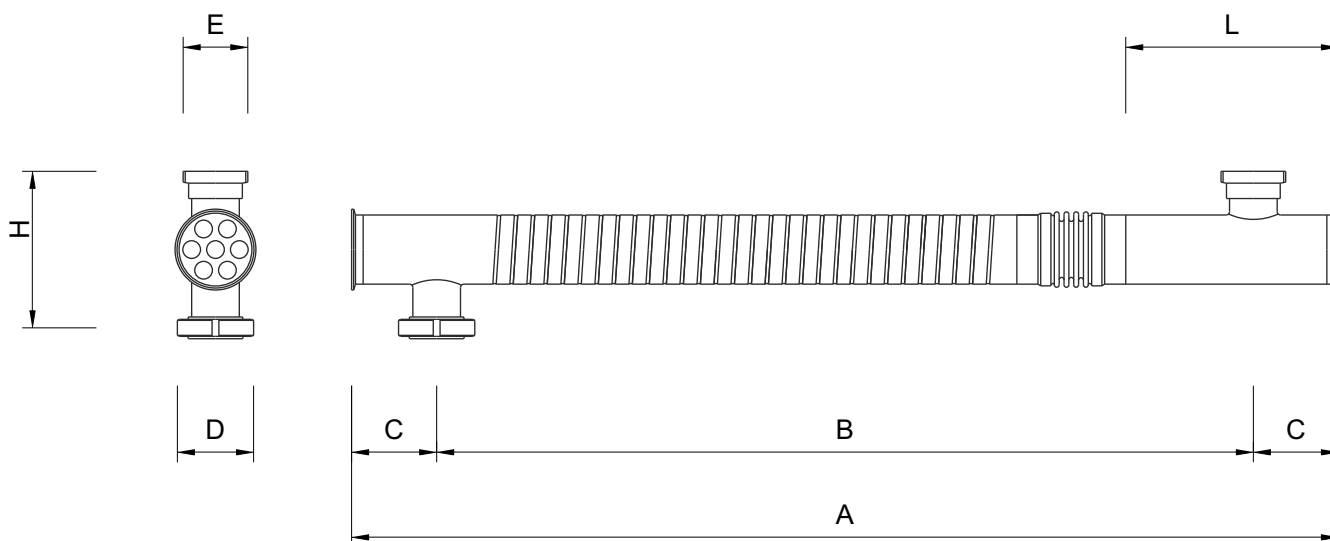
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 7 25 1 1000 | 6.06 | 2.51 | 0.51 | 6008.27 | 2758.57 | 17.9 |
| MLW 114 7 25 1 1500 | 9.07 | 3.89 | 0.79 | 6008.27 | 2758.57 | 23.7 |
| MLW 114 7 25 1 2000 | 12.07 | 5.27 | 1.07 | 6008.27 | 2758.57 | 29.6 |
| MLW 114 7 25 1 3000 | 18.08 | 8.03 | 1.63 | 6008.27 | 2758.57 | 41.3 |
| MLW 114 7 25 1 6000 | 36.11 | 16.30 | 3.30 | 6008.27 | 2758.57 | 76.3 |

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 | |
| MLW 114 7 25 1 1000 | Shell / Tubes | | | | | | | | 8.2 | | | | | |
| MLW 114 7 25 1 1500 | Shell / Tubes | | | | | 5.5 | | | | | | | | 12.8 |
| MLW 114 7 25 1 2000 | Shell / Tubes | | | | 4.1 | | | | | 9.4 | | | | |
| MLW 114 7 25 1 3000 | Shell / Tubes | | 2.7 | | | | | 6.2 | | | | | 11.0 | |
| MLW 114 7 25 1 6000 | Shell / Tubes | 1.3 | | | 3.0 | | 5.5 | | | | | | | 12.2 |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 7 25 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" more connections on demand | DIN 11851 DN 65-80 M/F CLAMP 3" more connections on demand | 230 | 312.5 |
| MLW 114 7 25 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 7 25 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 7 25 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 7 25 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

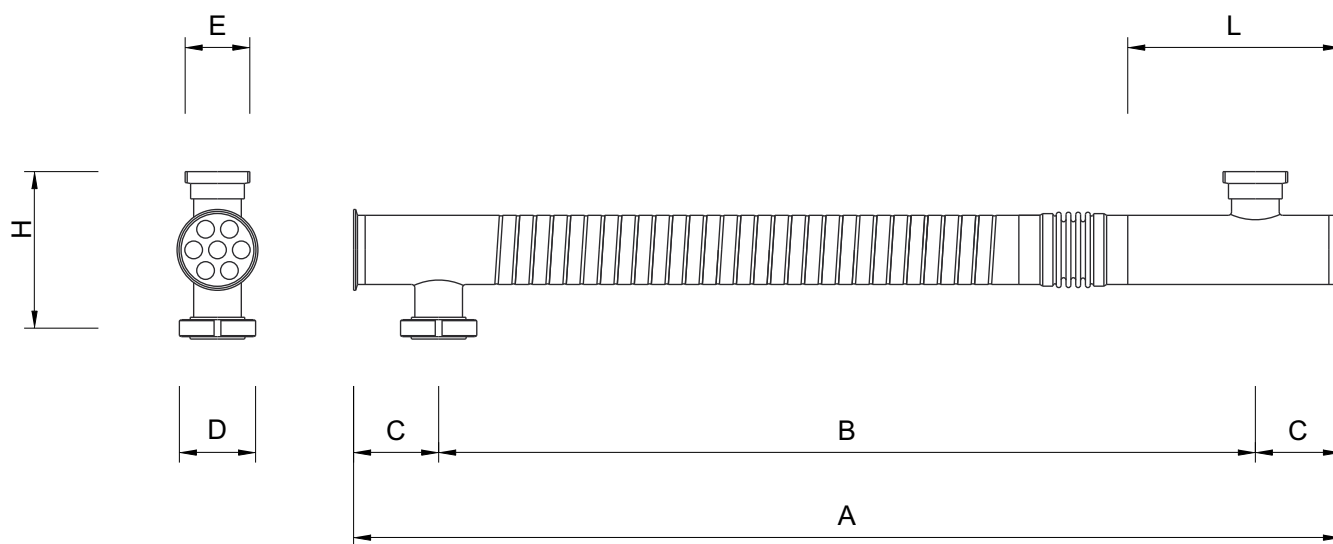
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 7 28 1 1000 | 5.37 | 3.13 | 0.56 | 5244.96 | 3436.12 | 18.5 |
| MLW 114 7 28 1 1500 | 7.99 | 4.84 | 0.87 | 5244.96 | 3436.12 | 24.7 |
| MLW 114 7 28 1 2000 | 10.61 | 6.56 | 1.18 | 5244.96 | 3436.12 | 30.9 |
| MLW 114 7 28 1 3000 | 15.86 | 10.00 | 1.79 | 5244.96 | 3436.12 | 43.2 |
| MLW 114 7 28 1 6000 | 31.59 | 20.31 | 3.64 | 5244.96 | 3436.12 | 80.3 |

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 | |
| MLW 114 7 28 1 1000 | Shell / Tubes | | | | | | | | | 9.3 | | | | |
| MLW 114 7 28 1 1500 | Shell / Tubes | | | | | | 6.2 | | | | | 10.3 | | |
| MLW 114 7 28 1 2000 | Shell / Tubes | | | | 4.7 | | | | 7.6 | | | | | |
| MLW 114 7 28 1 3000 | Shell / Tubes | | | 3.1 | | | 5.0 | | | | | | | 12.6 |
| MLW 114 7 28 1 6000 | Shell / Tubes | 1.5 | | 2.4 | | | | 6.3 | | | | 9.8 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 7 28 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" | DIN 11851 DN 65-80 M/F CLAMP 3" | 230 | 312.5 |
| MLW 114 7 28 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 7 28 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 7 28 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 7 28 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

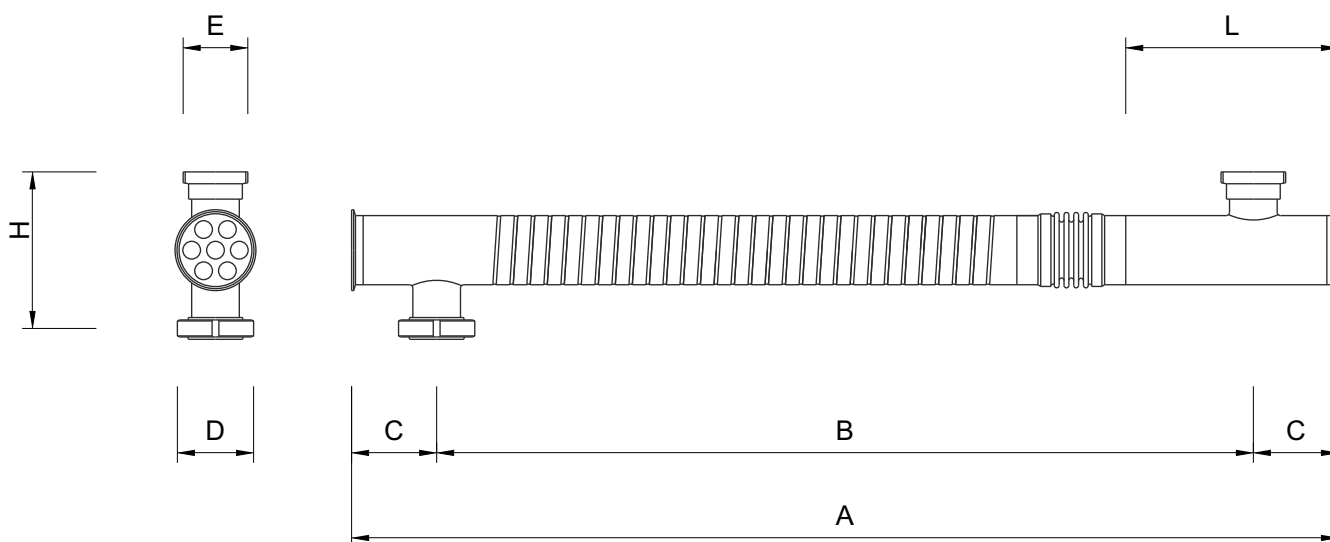
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 7 32 1 1000 | 4.17 | 4.21 | 0.64 | 3925.49 | 4623.64 | 19.4 |
| MLW 114 7 32 1 1500 | 6.13 | 6.52 | 0.99 | 3925.49 | 4623.64 | 26.1 |
| MLW 114 7 32 1 2000 | 8.09 | 8.83 | 1.34 | 3925.49 | 4623.64 | 32.8 |
| MLW 114 7 32 1 3000 | 12.02 | 13.45 | 2.05 | 3925.49 | 4623.64 | 46.2 |
| MLW 114 7 32 1 6000 | 23.80 | 27.33 | 4.16 | 3925.49 | 4623.64 | 86.4 |

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 | | | |
| MLW 114 7 32 1 1000 | Shell / Tubes | | | | | | | | | | | | 11.9 | 11.8 | | |
| MLW 114 7 32 1 1500 | Shell / Tubes | | | | | | | | 7.6 | 8.1 | | | | | | |
| MLW 114 7 32 1 2000 | Shell / Tubes | | | | | 5.6 | 6.1 | | | | | | | | | |
| MLW 114 7 32 1 3000 | Shell / Tubes | | | 3.7 | 4.1 | | | | | | | | | | | |
| MLW 114 7 32 1 6000 | Shell / Tubes | 1.8 | 2.1 | | | | | | 7.3 | 8.4 | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 7 32 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" | DIN 11851 DN 65-80 M/F CLAMP 3" | 230 | 312.5 |
| MLW 114 7 32 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 7 32 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 7 32 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 7 32 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

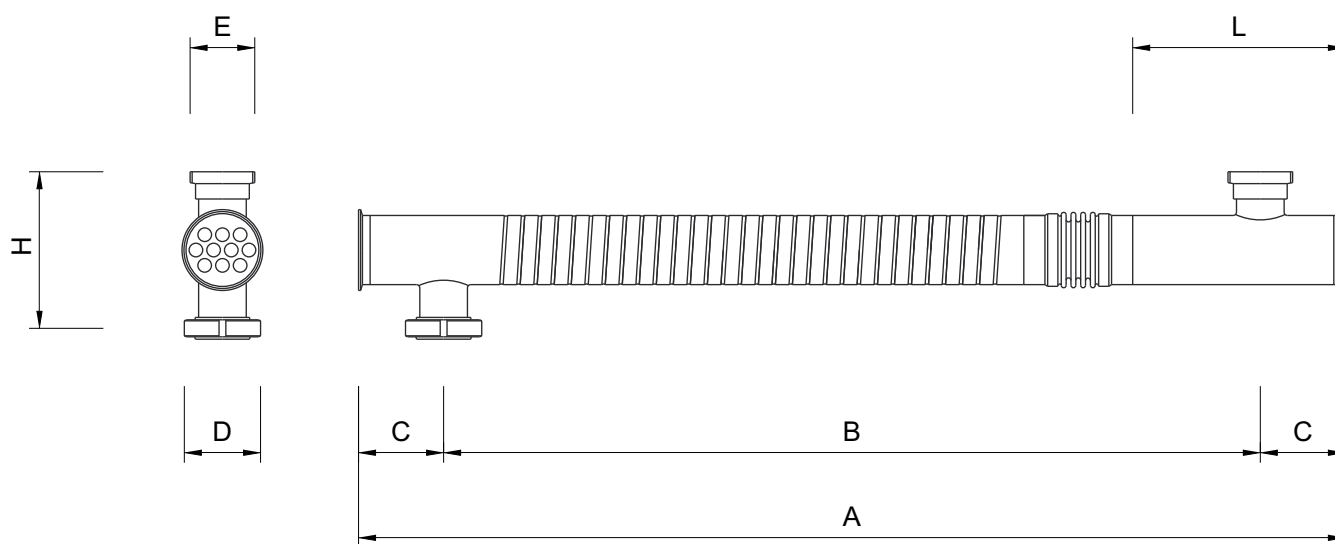
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 10 18 1 1000 | 6.98 | 1.83 | 0.51 | 7010.53 | 2010.62 | 16.1 |
| MLW 114 10 18 1 1500 | 10.48 | 2.83 | 0.80 | 7010.53 | 2010.62 | 20.9 |
| MLW 114 10 18 1 2000 | 13.99 | 3.84 | 1.08 | 7010.53 | 2010.62 | 25.8 |
| MLW 114 10 18 1 3000 | 21.00 | 5.85 | 1.65 | 7010.53 | 2010.62 | 35.4 |
| MLW 114 10 18 1 6000 | 42.03 | 11.88 | 3.34 | 7010.53 | 2010.62 | 64.5 |

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 | | | |
| MLW 114 10 18 1 1000 | Shell / Tubes | | | | | | | 7.1 | | | | | | | | |
| MLW 114 10 18 1 1500 | Shell / Tubes | | | | 4.7 | | | | | | | | | | | |
| MLW 114 10 18 1 2000 | Shell / Tubes | | | 3.5 | | | | | | | | | | | | |
| MLW 114 10 18 1 3000 | Shell / Tubes | | 2.3 | | | | | | | 8.5 | 9.5 | | | | | |
| MLW 114 10 18 1 6000 | Shell / Tubes | 1.1 | | | 4.7 | 4.2 | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 10 18 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" | DIN 11851 DN 65-80 M/F CLAMP 3" | 230 | 312.5 |
| MLW 114 10 18 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 10 18 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 10 18 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 10 18 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

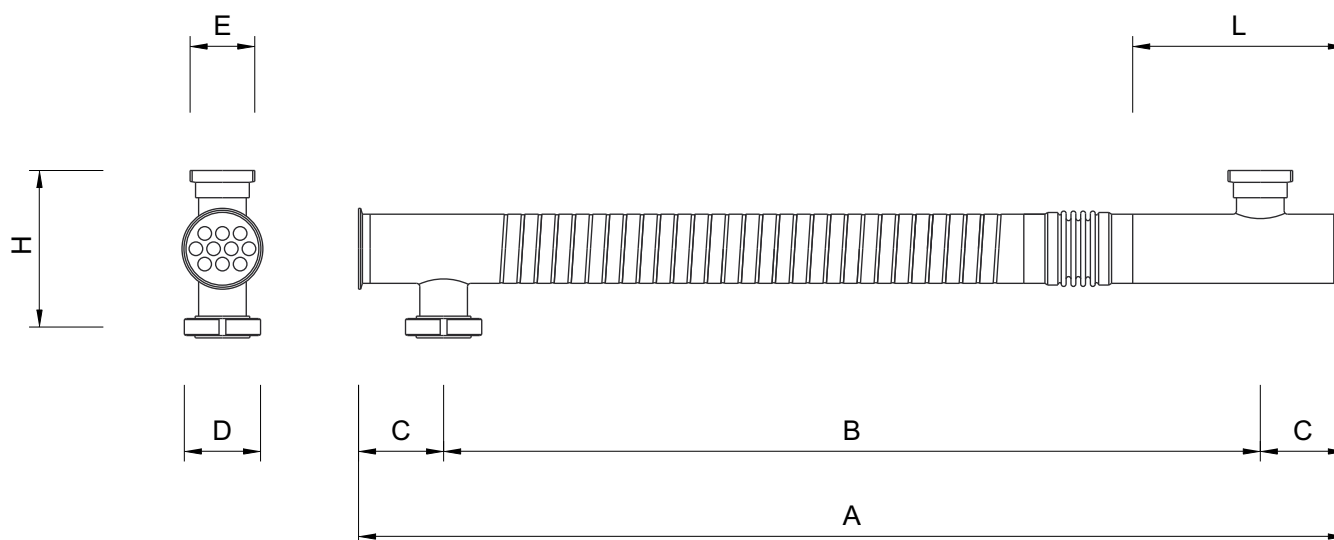
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 10 20 1 1000 | 6.43 | 2.32 | 0.57 | 6413.63 | 2544.69 | 16.5 |
| MLW 114 10 20 1 1500 | 9.64 | 3.59 | 0.89 | 6413.63 | 2544.69 | 21.6 |
| MLW 114 10 20 1 2000 | 12.85 | 4.86 | 1.20 | 6413.63 | 2544.69 | 26.7 |
| MLW 114 10 20 1 3000 | 19.26 | 7.41 | 1.83 | 6413.63 | 2544.69 | 36.9 |
| MLW 114 10 20 1 6000 | 38.50 | 15.04 | 3.71 | 6413.63 | 2544.69 | 67.4 |

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 | |
| MLW 114 10 20 1 1000 | Shell / Tubes | | | | | | | 7.7 | | | | | | |
| MLW 114 10 20 1 1500 | Shell / Tubes | | | | | 5.1 | | | | | | | | |
| MLW 114 10 20 1 2000 | Shell / Tubes | | | 3.8 | | | | | | | 10.2 | | | |
| MLW 114 10 20 1 3000 | Shell / Tubes | | 2.5 | | | | | 6.7 | | | 10.3 | | | |
| MLW 114 10 20 1 6000 | Shell / Tubes | 1.2 | | | 3.3 | | 5.1 | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 10 20 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" | DIN 11851 DN 65-80 M/F CLAMP 3" | 230 | 312.5 |
| MLW 114 10 20 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 10 20 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 10 20 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 10 20 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

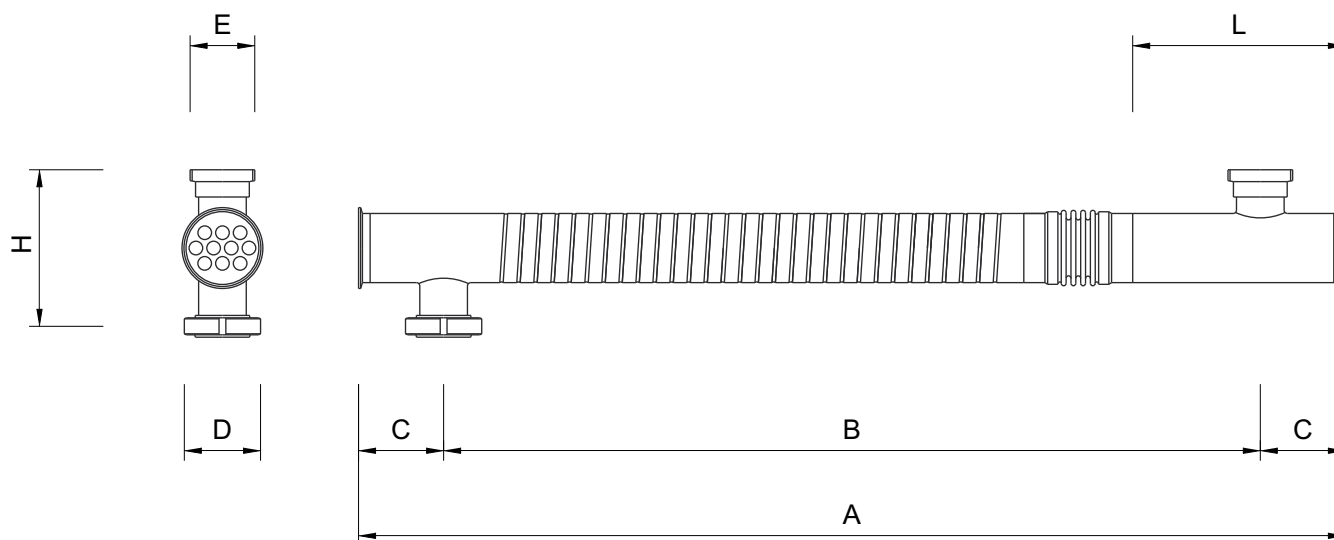
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 10 22 1 1000 | 5.83 | 2.86 | 0.63 | 5753.90 | 3141.59 | 17.0 |
| MLW 114 10 22 1 1500 | 8.71 | 4.43 | 0.97 | 5753.90 | 3141.59 | 22.3 |
| MLW 114 10 22 1 2000 | 11.59 | 6.00 | 1.32 | 5753.90 | 3141.59 | 27.6 |
| MLW 114 10 22 1 3000 | 17.34 | 9.14 | 2.01 | 5753.90 | 3141.59 | 38.3 |
| MLW 114 10 22 1 6000 | 34.60 | 18.57 | 4.08 | 5753.90 | 3141.59 | 70.3 |

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 | | | | |
| MLW 114 10 22 1 1000 | Shell / Tubes | | | | | | | | 8.5 | | | | | | | | |
| MLW 114 10 22 1 1500 | Shell / Tubes | | | | | 5.7 | | | | | | | | | 11.2 | | |
| MLW 114 10 22 1 2000 | Shell / Tubes | | | | 4.3 | | | | | 8.3 | | | | | | | |
| MLW 114 10 22 1 3000 | Shell / Tubes | | 2.8 | | | | | 5.4 | | | | | | | 11.5 | | |
| MLW 114 10 22 1 6000 | Shell / Tubes | 1.4 | | 2.6 | | | | 5.7 | | | | | | | 10.7 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 10 22 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" more connections on demand | DIN 11851 DN 65-80 M/F CLAMP 3" more connections on demand | 230 | 312.5 |
| MLW 114 10 22 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 10 22 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 10 22 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 10 22 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

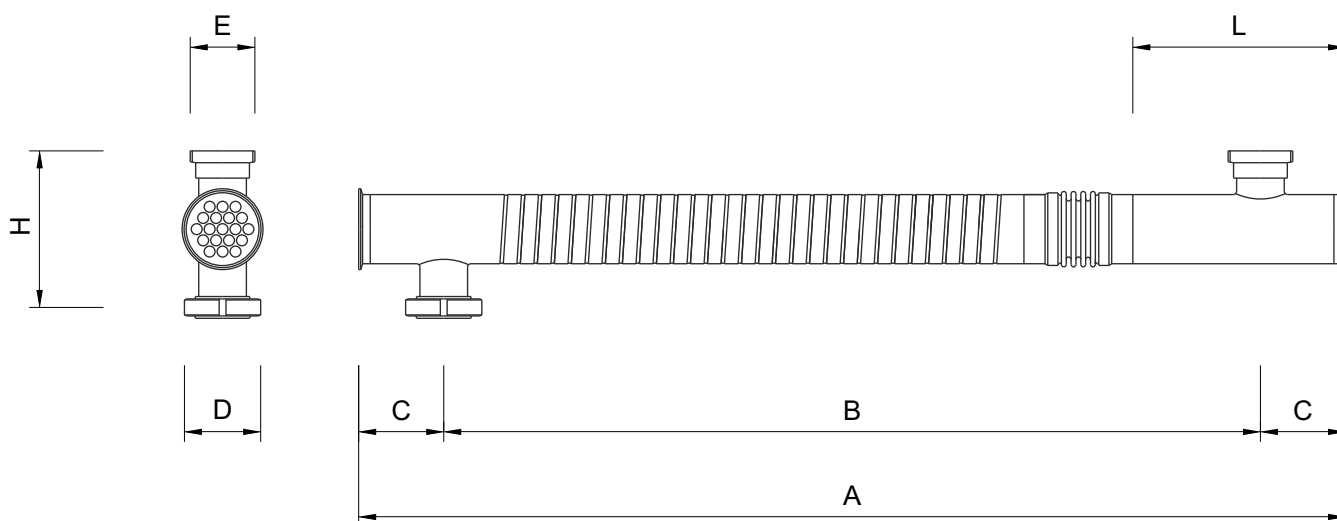
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 19 16 1 1000 | 5.82 | 2.66 | 0.87 | 5735.05 | 2924.82 | 18.6 |
| MLW 114 19 16 1 1500 | 8.68 | 4.12 | 1.35 | 5735.05 | 2924.82 | 24.9 |
| MLW 114 19 16 1 2000 | 11.55 | 5.59 | 1.82 | 5735.05 | 2924.82 | 31.2 |
| MLW 114 19 16 1 3000 | 17.29 | 8.51 | 2.78 | 5735.05 | 2924.82 | 43.7 |
| MLW 114 19 16 1 6000 | 34.49 | 17.29 | 5.64 | 5735.05 | 2924.82 | 81.3 |

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 | |
| MLW 114 19 16 1 1000 | Shell / Tubes | | | | | | | | 8.5 | | | | | |
| MLW 114 19 16 1 1500 | Shell / Tubes | | | | | 5.7 | | | | | | | | 12.1 |
| MLW 114 19 16 1 2000 | Shell / Tubes | | | | 4.3 | | | | | 8.9 | | | | |
| MLW 114 19 16 1 3000 | Shell / Tubes | | 2.8 | | | | 5.8 | | | | | | 11.5 | |
| MLW 114 19 16 1 6000 | Shell / Tubes | 1.4 | | 2.8 | | | 5.7 | | | | | | 11.5 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 19 16 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" | DIN 11851 DN 65-80 M/F CLAMP 3" | 230 | 312.5 |
| MLW 114 19 16 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 19 16 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 19 16 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 19 16 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

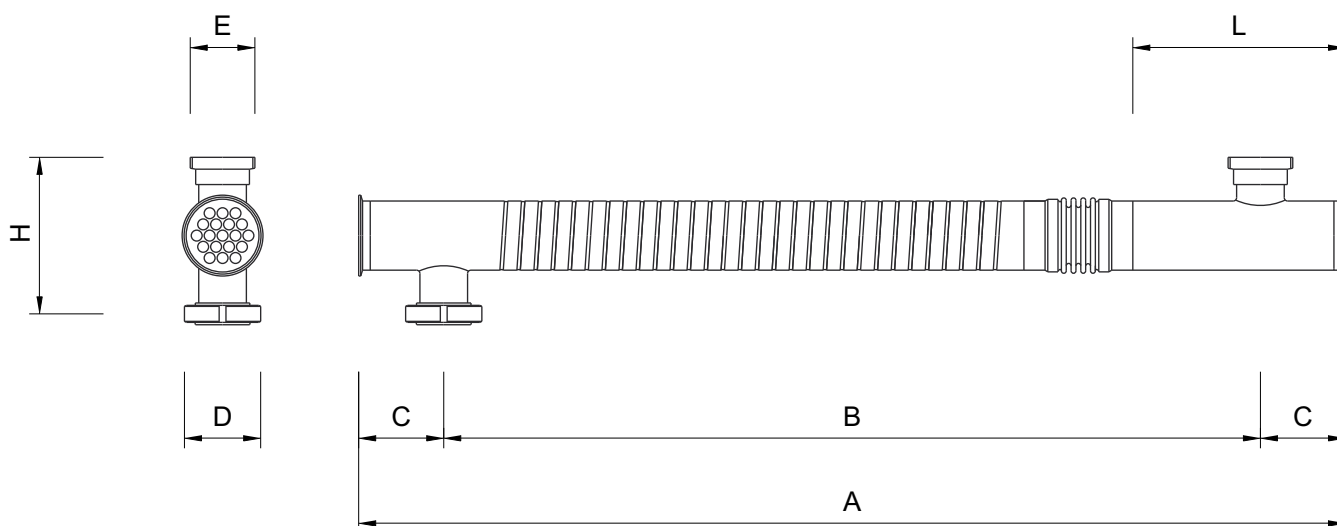
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 19 18 1 1000 | 4.89 | 3.48 | 0.98 | 4720.31 | 3820.18 | 18.6 |
| MLW 114 19 18 1 1500 | 7.25 | 5.39 | 1.51 | 4720.31 | 3820.18 | 24.9 |
| MLW 114 19 18 1 2000 | 9.61 | 7.30 | 2.05 | 4720.31 | 3820.18 | 31.2 |
| MLW 114 19 18 1 3000 | 14.33 | 11.12 | 3.13 | 4720.31 | 3820.18 | 43.7 |
| MLW 114 19 18 1 6000 | 28.49 | 22.58 | 6.35 | 4720.31 | 3820.18 | 81.3 |

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 | |
| MLW 114 19 18 1 1000 | Shell / Tubes | | | | | | | | | | | 10.2 | | |
| MLW 114 19 18 1 1500 | Shell / Tubes | | | | | | 6.8 | | | | 9.2 | | | |
| MLW 114 19 18 1 2000 | Shell / Tubes | | | | | 5.2 | 6.8 | | | | | | | |
| MLW 114 19 18 1 3000 | Shell / Tubes | | | 3.4 | 4.4 | | | | | | | | | |
| MLW 114 19 18 1 6000 | Shell / Tubes | 1.7 | 2.2 | | | | | 7.0 | 8.8 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 19 18 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" more connections on demand | DIN 11851 DN 65-80 M/F CLAMP 3" more connections on demand | 230 | 312.5 |
| MLW 114 19 18 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 19 18 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 19 18 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 19 18 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

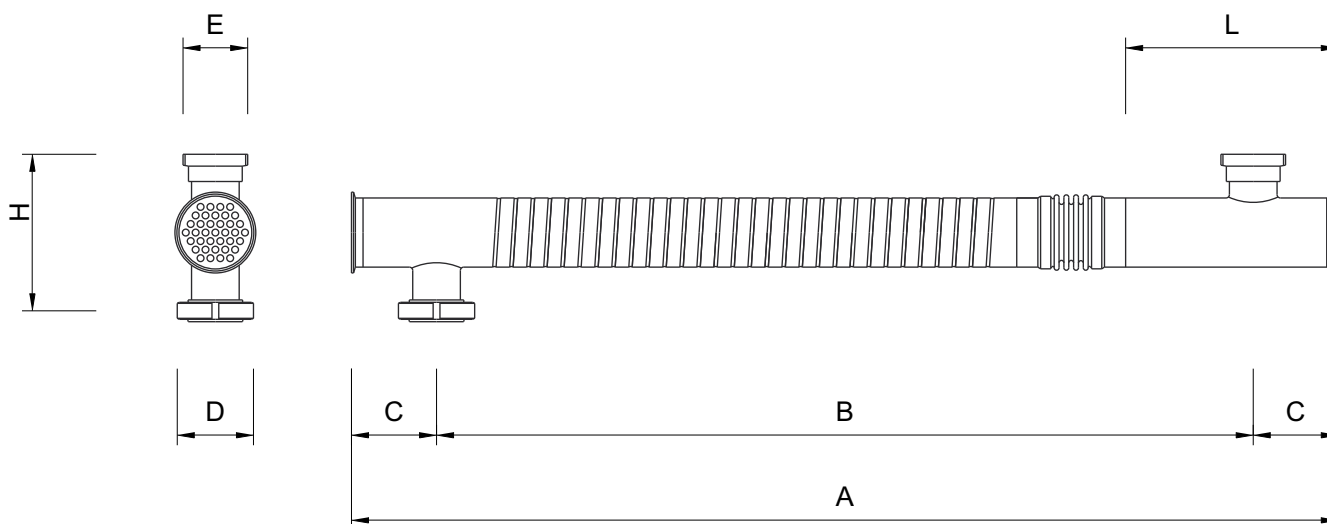
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 114 37 12 1 1000 | 5.48 | 2.64 | 1.27 | 5370.62 | 2905.97 | 21.4 |
| MLW 114 37 12 1 1500 | 8.17 | 4.10 | 1.97 | 5370.62 | 2905.97 | 29.2 |
| MLW 114 37 12 1 2000 | 10.85 | 5.55 | 2.66 | 5370.62 | 2905.97 | 36.9 |
| MLW 114 37 12 1 3000 | 16.22 | 8.46 | 4.06 | 5370.62 | 2905.97 | 52.5 |
| MLW 114 37 12 1 6000 | 32.34 | 17.17 | 8.24 | 5370.62 | 2905.97 | 99.1 |

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 |
| MLW 114 37 12 1 1000 | Shell / Tubes | | | | | | | | | 9.1 | | | |
| MLW 114 37 12 1 1500 | Shell / Tubes | | | | | | 6.1 | | | | | | 12.1 |
| MLW 114 37 12 1 2000 | Shell / Tubes | | | | 4.6 | | | | | 9.0 | | | |
| MLW 114 37 12 1 3000 | Shell / Tubes | | | 3.0 | | | 5.9 | | | | | | 12.3 |
| MLW 114 37 12 1 6000 | Shell / Tubes | 1.5 | | 2.9 | | | | 6.1 | | | | 11.6 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--------------------------------|------------------------------------|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 114 37 12 1 1000 | 950 | 700 | 125 | DIN 11851 DN 125 F CLAMP 4" | DIN 11851 DN 65-80 M/F CLAMP 3" | 230 | 312.5 |
| MLW 114 37 12 1 1500 | 1450 | 1200 | | | | | |
| MLW 114 37 12 1 2000 | 1950 | 1700 | | | | | |
| MLW 114 37 12 1 3000 | 2950 | 2700 | | | | | |
| MLW 114 37 12 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

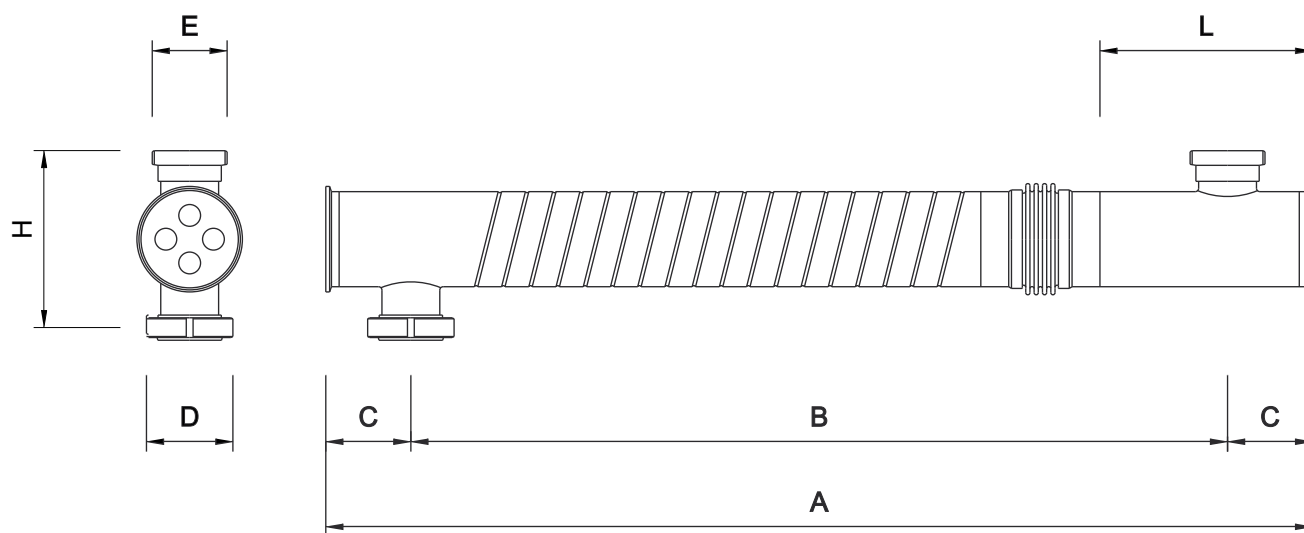
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 4 40 1 1000 | 9.53 | 3.91 | 0.46 | 9436.16 | 4300.84 | 22.1 |
| MLW 139 4 40 1 1500 | 14.25 | 6.06 | 0.71 | 9436.16 | 4300.84 | 28.3 |
| MLW 139 4 40 1 2000 | 18.97 | 8.21 | 0.96 | 9436.16 | 4300.84 | 34.6 |
| MLW 139 4 40 1 3000 | 28.40 | 12.52 | 1.46 | 9436.16 | 4300.84 | 47.0 |
| MLW 139 4 40 1 6000 | 56.71 | 25.42 | 2.97 | 9436.16 | 4300.84 | 84.3 |

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 | |
| MLW 139 4 40 1 1000 | Shell / Tubes | | | | | 5.2 | | | | | | | | 12.7 |
| MLW 139 4 40 1 1500 | Shell / Tubes | | | 3.5 | | | | | | | 8.2 | | | |
| MLW 139 4 40 1 2000 | Shell / Tubes | | 2.6 | | | | | 6.0 | | | | 10.5 | | |
| MLW 139 4 40 1 3000 | Shell / Tubes | 1.7 | | | 3.9 | | | | 7.0 | | | | | |
| MLW 139 4 40 1 6000 | Shell / Tubes | | 1.9 | | 3.5 | | | | | 7.8 | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 4 40 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 4 40 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 4 40 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 4 40 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 4 40 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

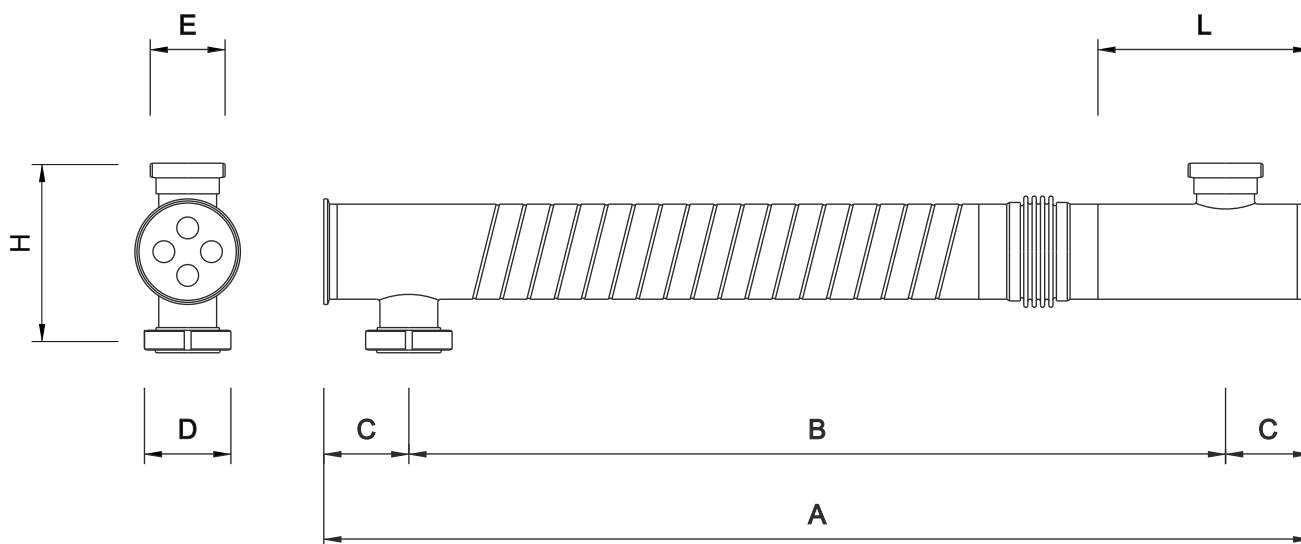
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 4 48 1 1000 | 7.44 | 5.87 | 0.55 | 7133.72 | 6446.83 | 23.3 |
| MLW 139 4 48 1 1500 | 11.00 | 9.09 | 0.86 | 7133.72 | 6446.83 | 30.1 |
| MLW 139 4 48 1 2000 | 14.57 | 12.31 | 1.16 | 7133.72 | 6446.83 | 36.9 |
| MLW 139 4 48 1 3000 | 21.70 | 18.76 | 1.77 | 7133.72 | 6446.83 | 50.6 |
| MLW 139 4 48 1 6000 | 43.11 | 38.10 | 3.59 | 7133.72 | 6446.83 | 91.5 |

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 |
| MLW 139 4 48 1 1000 | Shell / Tubes | | | | | | 6.7 | | 8.5 | | | | |
| MLW 139 4 48 1 1500 | Shell / Tubes | | | | 4.5 | 5.5 | | | | | | | |
| MLW 139 4 48 1 2000 | Shell / Tubes | | | 3.4 | 4.0 | | | | | | | | |
| MLW 139 4 48 1 3000 | Shell / Tubes | | 2.3 | 2.6 | | | | | 9.2 | 10.6 | | | |
| MLW 139 4 48 1 6000 | Shell / Tubes | 1.1 | 1.3 | | 4.6 | 5.2 | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 4 48 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 4 48 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 4 48 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 4 48 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 4 48 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

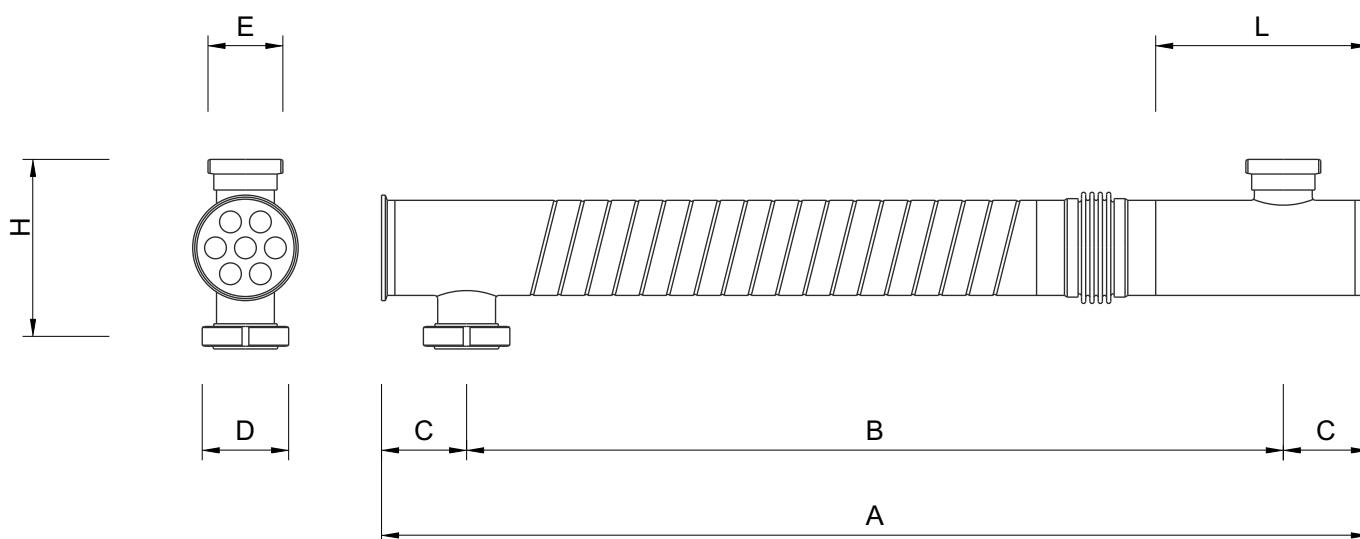
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 7 28 1 1000 | 10.18 | 3.13 | 0.56 | 10152.44 | 3436.12 | 23.2 |
| MLW 139 7 28 1 1500 | 15.26 | 4.84 | 0.87 | 10152.44 | 3436.12 | 30.0 |
| MLW 139 7 28 1 2000 | 20.34 | 6.56 | 1.18 | 10152.44 | 3436.12 | 36.8 |
| MLW 139 7 28 1 3000 | 30.49 | 10.00 | 1.79 | 10152.44 | 3436.12 | 50.4 |
| MLW 139 7 28 1 6000 | 60.95 | 20.31 | 3.64 | 10152.44 | 3436.12 | 91.2 |

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 | | | | |
| MLW 139 7 28 1 1000 | Shell / Tubes | | | | 4.9 | | | | | | | | | | | | |
| MLW 139 7 28 1 1500 | Shell / Tubes | | | 3.2 | | | | | | | | | | 10.3 | | | |
| MLW 139 7 28 1 2000 | Shell / Tubes | | 2.4 | | | | | | | 7.6 | | 9.8 | | | | | |
| MLW 139 7 28 1 3000 | Shell / Tubes | 1.6 | | | | | | 5.0 | 6.5 | | | | | | | | |
| MLW 139 7 28 1 6000 | Shell / Tubes | | | 2.4 | 3.2 | | | | | | | | | 9.8 | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 7 28 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 7 28 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 7 28 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 7 28 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 7 28 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

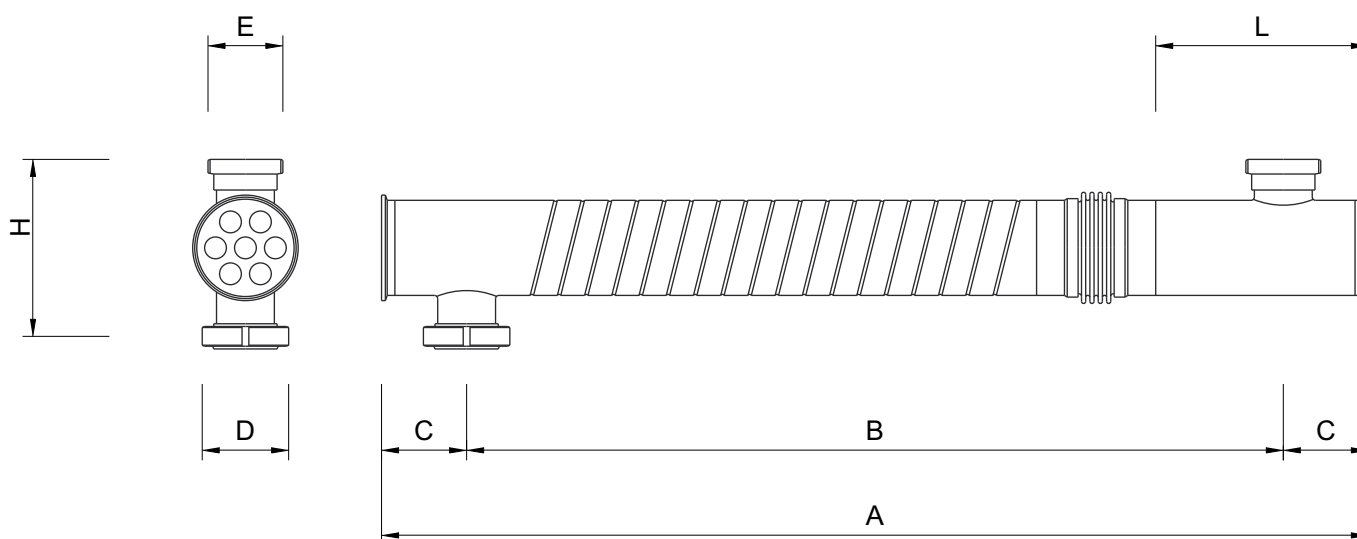
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 7 34 1 1000 | 8.32 | 4.81 | 0.68 | 8107.26 | 5283.37 | 24.6 |
| MLW 139 7 34 1 1500 | 12.38 | 7.45 | 1.05 | 8107.26 | 5283.37 | 32.2 |
| MLW 139 7 34 1 2000 | 16.43 | 10.09 | 1.43 | 8107.26 | 5283.37 | 39.8 |
| MLW 139 7 34 1 3000 | 24.54 | 15.37 | 2.18 | 8107.26 | 5283.37 | 54.9 |
| MLW 139 7 34 1 6000 | 48.86 | 31.22 | 4.42 | 8107.26 | 5283.37 | 100.3 |

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 | |
| MLW 139 7 34 1 1000 | Shell / Tubes | | | | | | 6.0 | | | | | 10.3 | | |
| MLW 139 7 34 1 1500 | Shell / Tubes | | | | 4.0 | | 6.7 | | | | | | | |
| MLW 139 7 34 1 2000 | Shell / Tubes | | | 3.0 | 4.9 | | | | | | | | | 12.1 |
| MLW 139 7 34 1 3000 | Shell / Tubes | | 2.0 | 3.2 | | | | | 8.1 | | | | | |
| MLW 139 7 34 1 6000 | Shell / Tubes | 1.0 | 1.6 | | 4.0 | | 6.4 | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 7 34 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 7 34 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 7 34 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 7 34 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 7 34 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

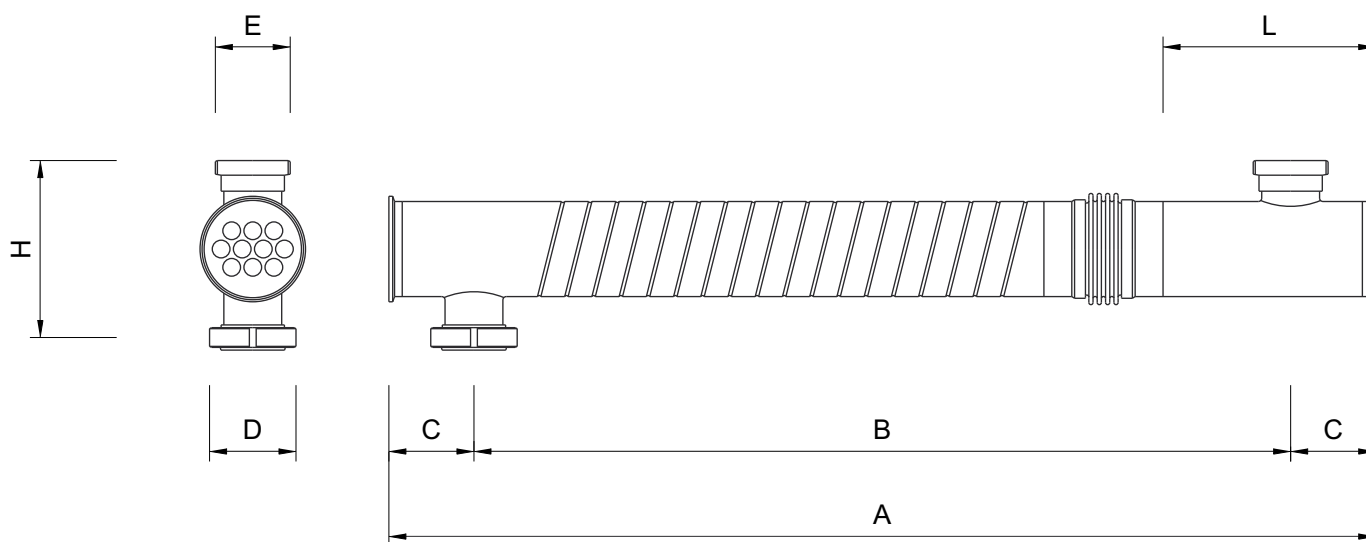
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 10 25 1 1000 | 9.64 | 3.46 | 0.71 | 9553.97 | 3801.33 | 24.9 |
| MLW 139 10 25 1 1500 | 14.42 | 5.36 | 1.11 | 9553.97 | 3801.33 | 32.6 |
| MLW 139 10 25 1 2000 | 19.19 | 7.26 | 1.50 | 9553.97 | 3801.33 | 40.3 |
| MLW 139 10 25 1 3000 | 28.75 | 11.06 | 2.29 | 9553.97 | 3801.33 | 55.7 |
| MLW 139 10 25 1 6000 | 57.41 | 22.47 | 4.64 | 9553.97 | 3801.33 | 102.0 |

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 |
| MLW 139 10 25 1 1000 | Shell / Tubes | | | | | 5.1 | | | | | | | |
| MLW 139 10 25 1 1500 | Shell / Tubes | | | 3.4 | | | | | | 9.3 | | | |
| MLW 139 10 25 1 2000 | Shell / Tubes | | 2.6 | | | | | 6.8 | | | 10.4 | | |
| MLW 139 10 25 1 3000 | Shell / Tubes | 1.7 | | | | 4.5 | | 6.9 | | | | | |
| MLW 139 10 25 1 6000 | Shell / Tubes | | 2.2 | 3.4 | | | | | | 8.9 | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 10 25 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 10 25 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 10 25 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 10 25 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 10 25 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

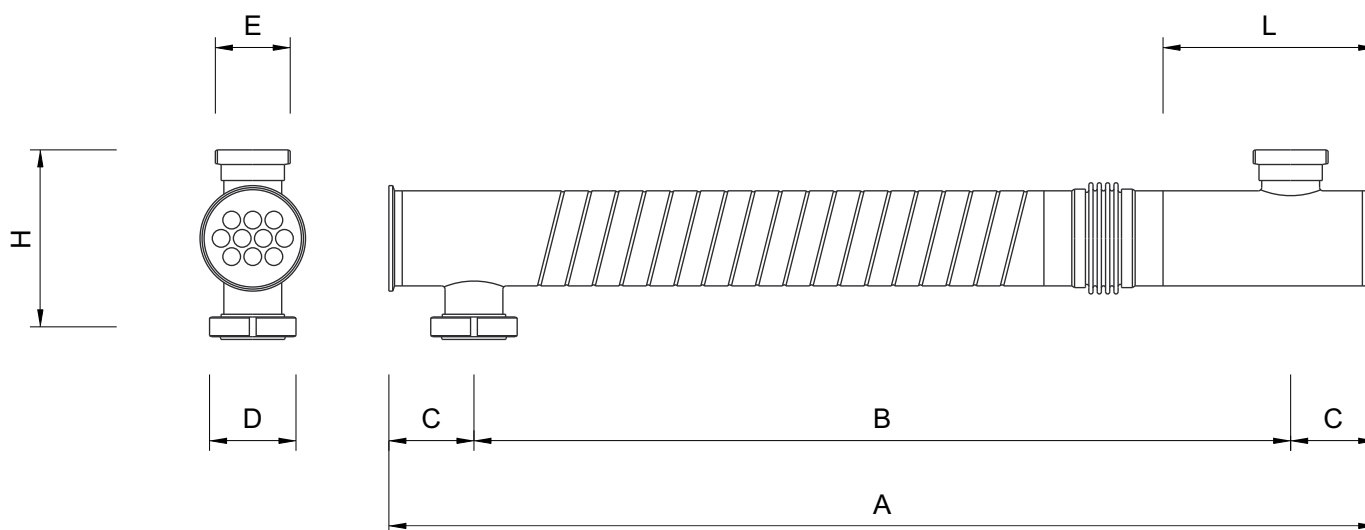
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 10 28 1 1000 | 8.50 | 4.47 | 0.80 | 8305.19 | 4908.74 | 25.9 |
| MLW 139 10 28 1 1500 | 12.66 | 6.92 | 1.24 | 8305.19 | 4908.74 | 34.1 |
| MLW 139 10 28 1 2000 | 16.81 | 9.38 | 1.68 | 8305.19 | 4908.74 | 42.4 |
| MLW 139 10 28 1 3000 | 25.11 | 14.28 | 2.56 | 8305.19 | 4908.74 | 58.9 |
| MLW 139 10 28 1 6000 | 50.03 | 29.01 | 5.20 | 8305.19 | 4908.74 | 108.5 |

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 | |
| MLW 139 10 28 1 1000 | Shell / Tubes | | | | | 5.8 | | | | | | | 11.1 | |
| MLW 139 10 28 1 1500 | Shell / Tubes | | | 3.9 | | | | | 7.2 | | | | | |
| MLW 139 10 28 1 2000 | Shell / Tubes | | 2.9 | | | | 5.3 | | | | | | 11.8 | |
| MLW 139 10 28 1 3000 | Shell / Tubes | 1.9 | | | 3.5 | | | | 7.9 | | | | | |
| MLW 139 10 28 1 6000 | Shell / Tubes | | 1.7 | | 3.9 | | | | 6.8 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 10 28 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 10 28 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 10 28 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 10 28 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 10 28 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

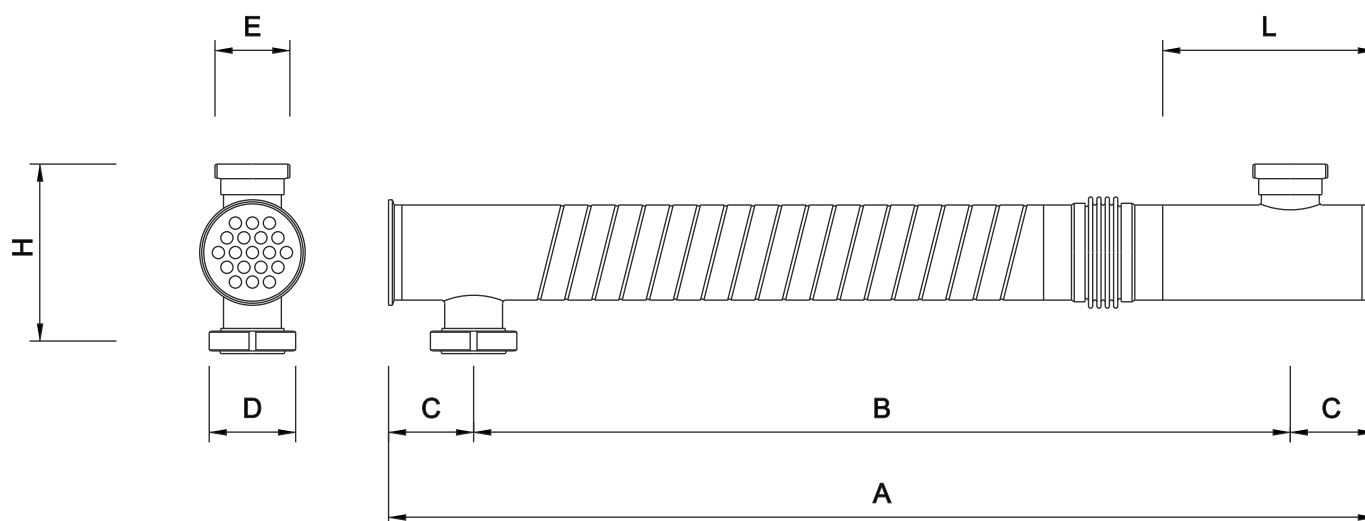
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 19 16 1 1000 | 10.63 | 2.66 | 0.87 | 10642.53 | 2924.82 | 23.3 |
| MLW 139 19 16 1 1500 | 15.95 | 4.12 | 1.35 | 10642.53 | 2924.82 | 30.2 |
| MLW 139 19 16 1 2000 | 21.27 | 5.59 | 1.82 | 10642.53 | 2924.82 | 37.1 |
| MLW 139 19 16 1 3000 | 31.91 | 8.51 | 2.78 | 10642.53 | 2924.82 | 50.9 |
| MLW 139 19 16 1 6000 | 63.84 | 17.29 | 5.64 | 10642.53 | 2924.82 | 92.1 |

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 | |
| MLW 139 19 16 1 1000 | Shell / Tubes | | | | 4.7 | | | | | | | | | |
| MLW 139 19 16 1 1500 | Shell / Tubes | | | 3.1 | | | | | | | | | 12.5 | 12.1 |
| MLW 139 19 16 1 2000 | Shell / Tubes | | 2.3 | | | | | | | 8.9 | 9.4 | | | |
| MLW 139 19 16 1 3000 | Shell / Tubes | 1.5 | | | | | 5.8 | 6.2 | | | | | | |
| MLW 139 19 16 1 6000 | Shell / Tubes | | 2.8 | 3.1 | | | | | | | | | 11.5 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 19 16 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 19 16 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 19 16 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 19 16 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 19 16 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

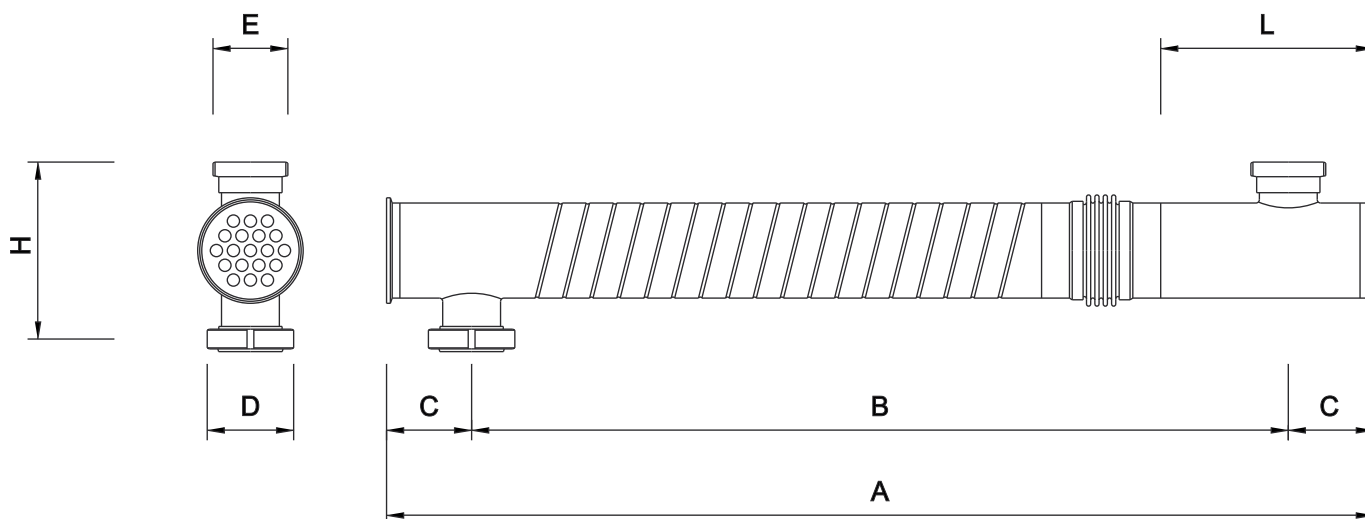
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 19 20 1 1000 | 8.67 | 4.40 | 1.09 | 8493.68 | 4834.91 | 25.1 |
| MLW 139 19 20 1 1500 | 12.92 | 6.82 | 1.68 | 8493.68 | 4834.91 | 32.9 |
| MLW 139 19 20 1 2000 | 17.17 | 9.23 | 2.28 | 8493.68 | 4834.91 | 40.7 |
| MLW 139 19 20 1 3000 | 25.66 | 14.07 | 3.47 | 8493.68 | 4834.91 | 56.3 |
| MLW 139 19 20 1 6000 | 51.14 | 28.57 | 7.06 | 8493.68 | 4834.91 | 103.2 |

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 | |
| MLW 139 19 20 1 1000 | Shell / Tubes | | | | | 5.7 | | | | | | | 11.3 | |
| MLW 139 19 20 1 1500 | Shell / Tubes | | | 3.8 | | | | | 7.3 | | | | | |
| MLW 139 19 20 1 2000 | Shell / Tubes | | 2.9 | | | | 5.4 | | | | | | 11.6 | |
| MLW 139 19 20 1 3000 | Shell / Tubes | 1.9 | | | 3.5 | | | | 7.7 | | | | | |
| MLW 139 19 20 1 6000 | Shell / Tubes | | 1.7 | | 3.9 | | | | 7.0 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 19 20 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 19 20 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 19 20 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 19 20 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 19 20 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

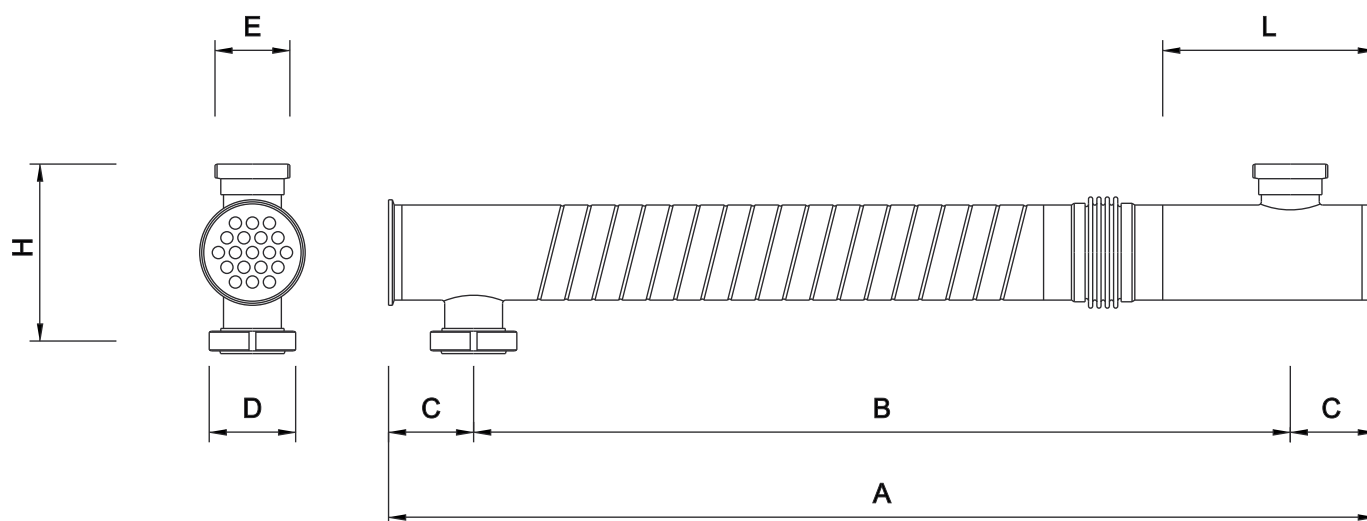
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 19 22 1 1000 | 7.53 | 5.43 | 1.19 | 7240.19 | 5969.03 | 25.9 |
| MLW 139 19 22 1 1500 | 11.15 | 8.42 | 1.85 | 7240.19 | 5969.03 | 34.2 |
| MLW 139 19 22 1 2000 | 14.77 | 11.40 | 2.51 | 7240.19 | 5969.03 | 42.5 |
| MLW 139 19 22 1 3000 | 22.01 | 17.37 | 3.82 | 7240.19 | 5969.03 | 59.0 |
| MLW 139 19 22 1 6000 | 43.73 | 35.28 | 7.76 | 7240.19 | 5969.03 | 108.8 |

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 | | | | |
| MLW 139 19 22 1 1000 | Shell / Tubes | | | | | | 6.6 | | | | 9.2 | | | | | | |
| MLW 139 19 22 1 1500 | Shell / Tubes | | | | 4.4 | | 5.9 | | | | | | | | | | |
| MLW 139 19 22 1 2000 | Shell / Tubes | | | 3.3 | | 4.3 | | | | | | | | | | | |
| MLW 139 19 22 1 3000 | Shell / Tubes | | 2.2 | 2.8 | | | | | | | | 9.0 | | | | 11.5 | |
| MLW 139 19 22 1 6000 | Shell / Tubes | 1.1 | 1.4 | | | 4.5 | | 5.6 | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 19 22 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 19 22 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 19 22 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 19 22 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 19 22 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

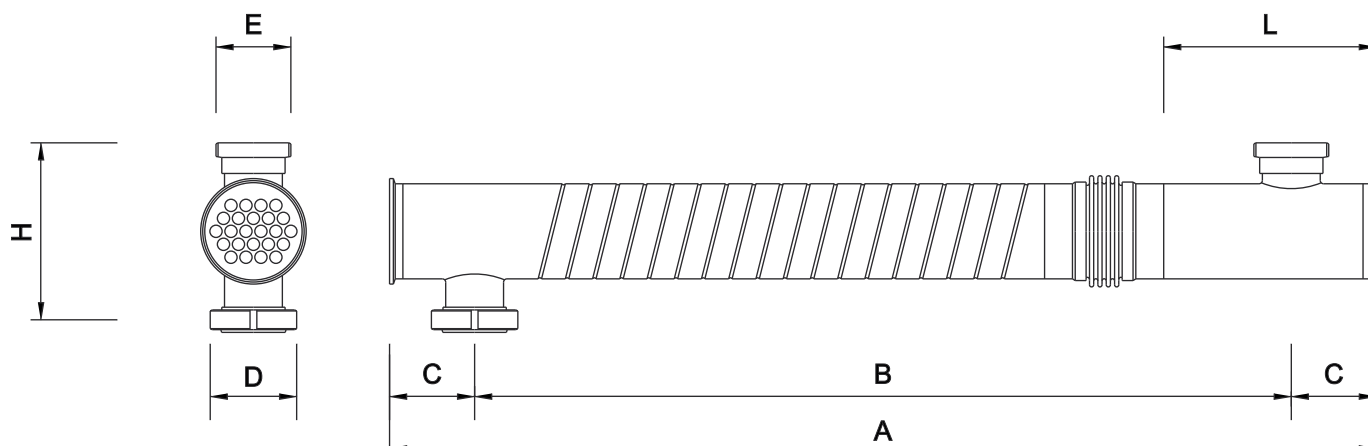
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 24 18 1 1000 | 8.55 | 4.39 | 1.24 | 8355.45 | 4825.49 | 26.1 |
| MLW 139 24 18 1 1500 | 12.73 | 6.80 | 1.91 | 8355.45 | 4825.49 | 34.5 |
| MLW 139 24 18 1 2000 | 16.90 | 9.22 | 2.59 | 8355.45 | 4825.49 | 42.9 |
| MLW 139 24 18 1 3000 | 25.26 | 14.04 | 3.95 | 8355.45 | 4825.49 | 59.7 |
| MLW 139 24 18 1 6000 | 50.33 | 28.52 | 8.02 | 8355.45 | 4825.49 | 110.1 |

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 | |
| MLW 139 24 18 1 1000 | Shell / Tubes | | | | | 5.8 | | | | | | | 11.3 | |
| MLW 139 24 18 1 1500 | Shell / Tubes | | | 3.9 | | | | | 7.3 | | | | | |
| MLW 139 24 18 1 2000 | Shell / Tubes | | 2.9 | | | | 5.4 | | | | | 11.8 | | |
| MLW 139 24 18 1 3000 | Shell / Tubes | 1.9 | | | 3.5 | | | | 7.9 | | | | | |
| MLW 139 24 18 1 6000 | Shell / Tubes | | 1.7 | | 3.9 | | | | 7.0 | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 24 18 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 24 18 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 24 18 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 24 18 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 24 18 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

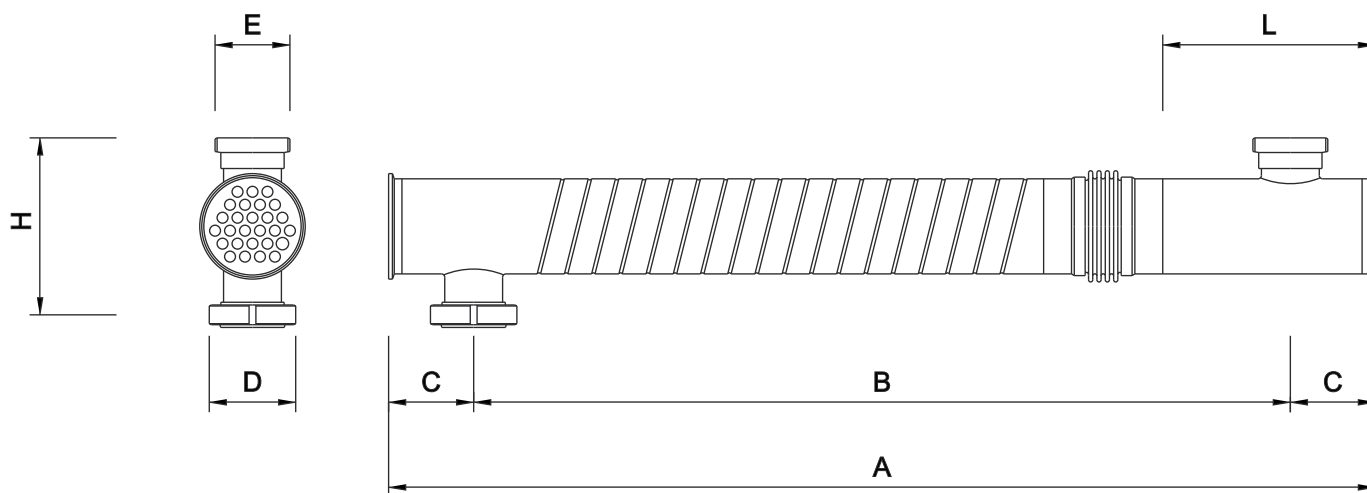
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 139 27 18 1 1000 | 7.85 | 4.94 | 1.39 | 7592.04 | 5428.67 | 27.2 |
| MLW 139 27 18 1 1500 | 11.65 | 7.65 | 2.15 | 7592.04 | 5428.67 | 36.3 |
| MLW 139 27 18 1 2000 | 15.45 | 10.37 | 2.92 | 7592.04 | 5428.67 | 45.3 |
| MLW 139 27 18 1 3000 | 23.04 | 15.8 | 4.44 | 7592.04 | 5428.67 | 63.4 |
| MLW 139 27 18 1 6000 | 45.81 | 32.08 | 9.02 | 7592.04 | 5428.67 | 117.5 |

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 | |
| MLW 139 27 18 1 1000 | Shell / Tubes | | | | | | 6.3 | | | | | 10.1 | | |
| MLW 139 27 18 1 1500 | Shell / Tubes | | | | 4.2 | | 6.5 | | | | | | | |
| MLW 139 27 18 1 2000 | Shell / Tubes | | | 3.2 | 4.8 | | | | | | | | | 12.9 |
| MLW 139 27 18 1 3000 | Shell / Tubes | | 2.1 | 3.1 | | | | | 8.6 | | | | | 12.6 |
| MLW 139 27 18 1 6000 | Shell / Tubes | 1.0 | 1.5 | | 4.3 | | 6.2 | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|---|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 139 27 18 1 1000 | 950 | 700 | 125 | DIN 11851 DN 150 F CLAMP 6" EN 1092-1 DN 125 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 260 | 312.5 |
| MLW 139 27 18 1 1500 | 1450 | 1200 | | | | | |
| MLW 139 27 18 1 2000 | 1950 | 1700 | | | | | |
| MLW 139 27 18 1 3000 | 2950 | 2700 | | | | | |
| MLW 139 27 18 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

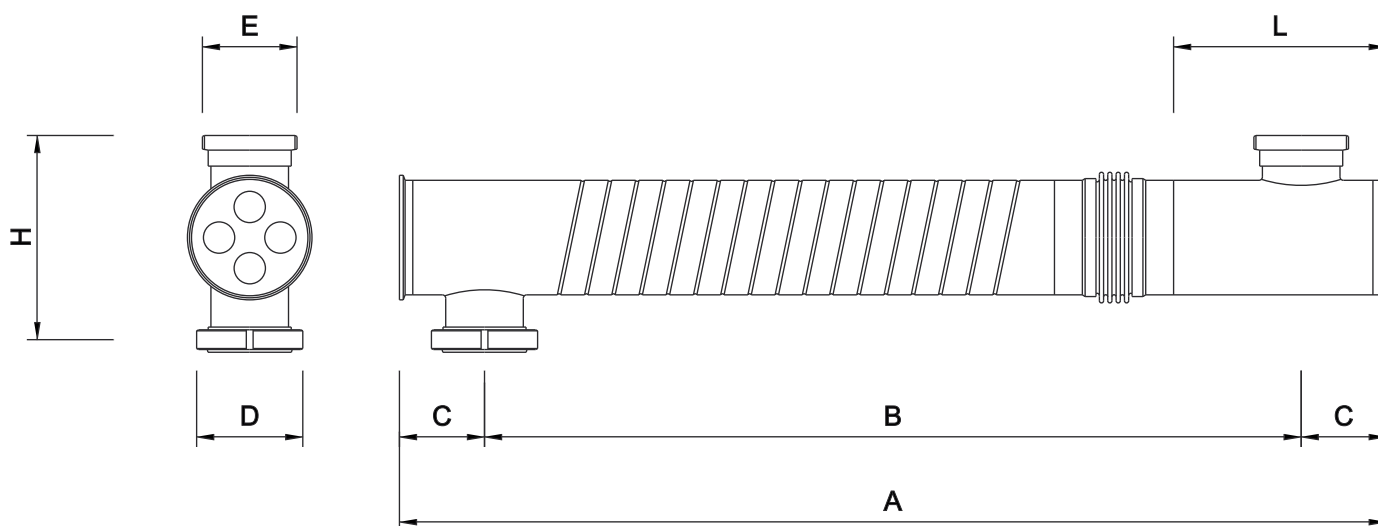
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 4 40 1 1000 | 15.75 | 3.91 | 0.46 | 16174.87 | 4300.84 | 28.3 |
| MLW 168 4 40 1 1500 | 23.84 | 6.06 | 0.71 | 16174.87 | 4300.84 | 35.2 |
| MLW 168 4 40 1 2000 | 31.93 | 8.21 | 0.96 | 16174.87 | 4300.84 | 42.1 |
| MLW 168 4 40 1 3000 | 48.10 | 12.52 | 1.46 | 16174.87 | 4300.84 | 55.9 |
| MLW 168 4 40 1 6000 | 96.63 | 25.42 | 2.97 | 16174.87 | 4300.84 | 97.3 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | |
|---------------------|-------------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| MLW 168 4 40 1 1000 | Shell / Tubes | | | 3.1 | | | | | | | | | 12.6 | 12.7 |
| MLW 168 4 40 1 1500 | Shell / Tubes | | 2.0 | | | | | | 8.3 | 8.2 | | | | |
| MLW 168 4 40 1 2000 | Shell / Tubes | 1.5 | | | | | 6.2 | 6.0 | | | | | | |
| MLW 168 4 40 1 3000 | Shell / Tubes | 1.0 | | | 3.9 | 4.1 | | | | | | | | |
| MLW 168 4 40 1 6000 | Shell / Tubes | | 1.9 | 2.0 | | | | | 7.8 | | | 10.3 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 4 40 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 4 40 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 4 40 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 4 40 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 4 40 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

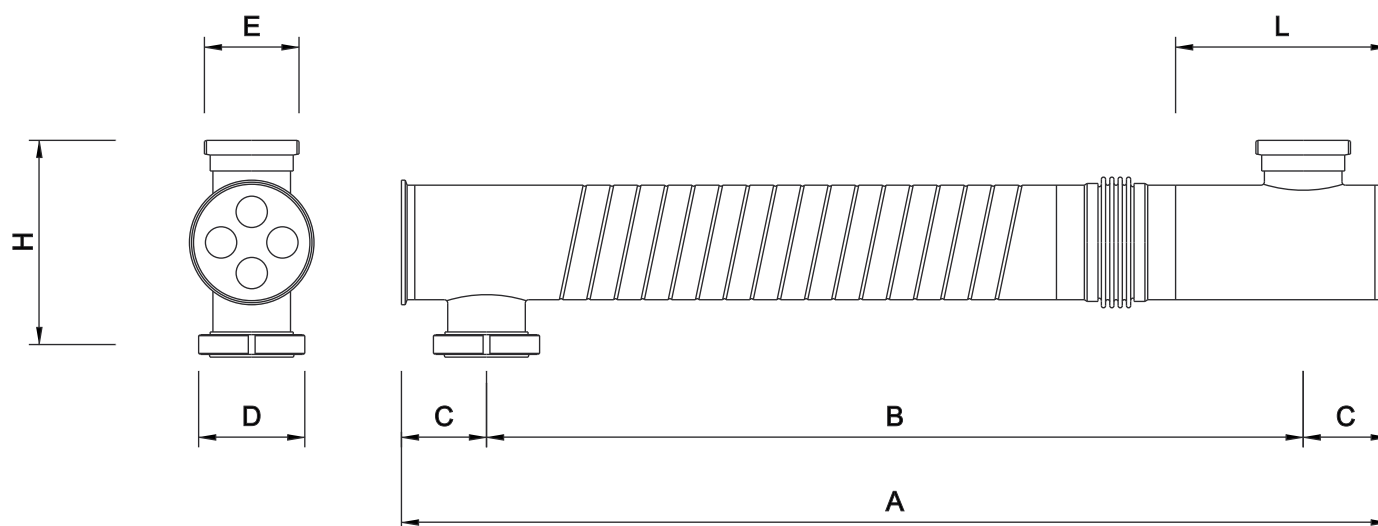
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 4 48 1 1000 | 13.66 | 5.87 | 0.55 | 13872.43 | 6446.83 | 29.4 |
| MLW 168 4 48 1 1500 | 20.59 | 9.09 | 0.86 | 13872.43 | 6446.83 | 36.9 |
| MLW 168 4 48 1 2000 | 27.53 | 12.31 | 1.16 | 13872.43 | 6446.83 | 44.4 |
| MLW 168 4 48 1 3000 | 41.40 | 18.76 | 1.77 | 13872.43 | 6446.83 | 59.5 |
| MLW 168 4 48 1 6000 | 83.02 | 38.10 | 3.59 | 13872.43 | 6446.83 | 104.6 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | |
|---------------------|-------------------|--------------------|-----|-----|---|-----|-----|-----|-----|-----|----|------|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MLW 168 4 48 1 1000 | Shell / Tubes | | | 3.6 | | | | | | 8.5 | | | |
| MLW 168 4 48 1 1500 | Shell / Tubes | | 2.4 | | | | 5.5 | | | 9.7 | | | |
| MLW 168 4 48 1 2000 | Shell / Tubes | 1.8 | | | | 4.0 | | | 7.2 | | | | |
| MLW 168 4 48 1 3000 | Shell / Tubes | 1.2 | | 2.6 | | 4.8 | | | | | | 10.6 | |
| MLW 168 4 48 1 6000 | Shell / Tubes | | 1.3 | 2.4 | | | | 5.2 | | | | | 12.0 |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 4 48 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 4 48 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 4 48 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 4 48 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 4 48 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

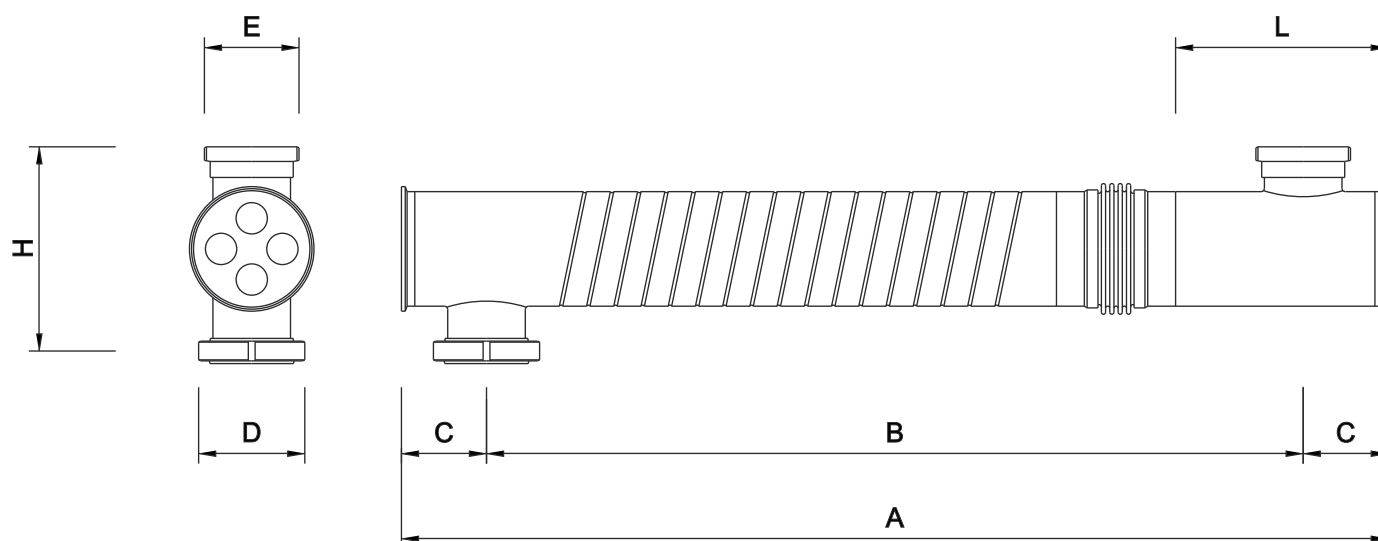
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 4 52 1 1000 | 12.60 | 6.86 | 0.59 | 12706.56 | 7542.96 | 29.9 |
| MLW 168 4 52 1 1500 | 18.95 | 10.64 | 0.92 | 12706.56 | 7542.96 | 37.7 |
| MLW 168 4 52 1 2000 | 25.30 | 14.41 | 1.25 | 12706.56 | 7542.96 | 45.5 |
| MLW 168 4 52 1 3000 | 38.01 | 21.95 | 1.90 | 12706.56 | 7542.96 | 61.1 |
| MLW 168 4 52 1 6000 | 76.13 | 44.58 | 3.86 | 12706.56 | 7542.96 | 107.8 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | | | | |
|---------------------|-------------------|--------------------|-----|-----|-----|-----|-----|---|---|-----|----|----|------|--|--|--|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| MLW 168 4 52 1 1000 | Shell / Tubes | | | 3.9 | | | | | | 7.2 | | | | | | | |
| MLW 168 4 52 1 1500 | Shell / Tubes | | 2.6 | | | 4.6 | | | | | | | 10.5 | | | | |
| MLW 168 4 52 1 2000 | Shell / Tubes | 1.9 | | | 3.4 | | | | | 7.9 | | | | | | | |
| MLW 168 4 52 1 3000 | Shell / Tubes | 1.3 | | 2.2 | | | 5.2 | | | | | | 9.1 | | | | |
| MLW 168 4 52 1 6000 | Shell / Tubes | | 1.1 | 2.6 | | | 4.4 | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 4 52 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 4 52 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 4 52 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 4 52 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 4 52 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

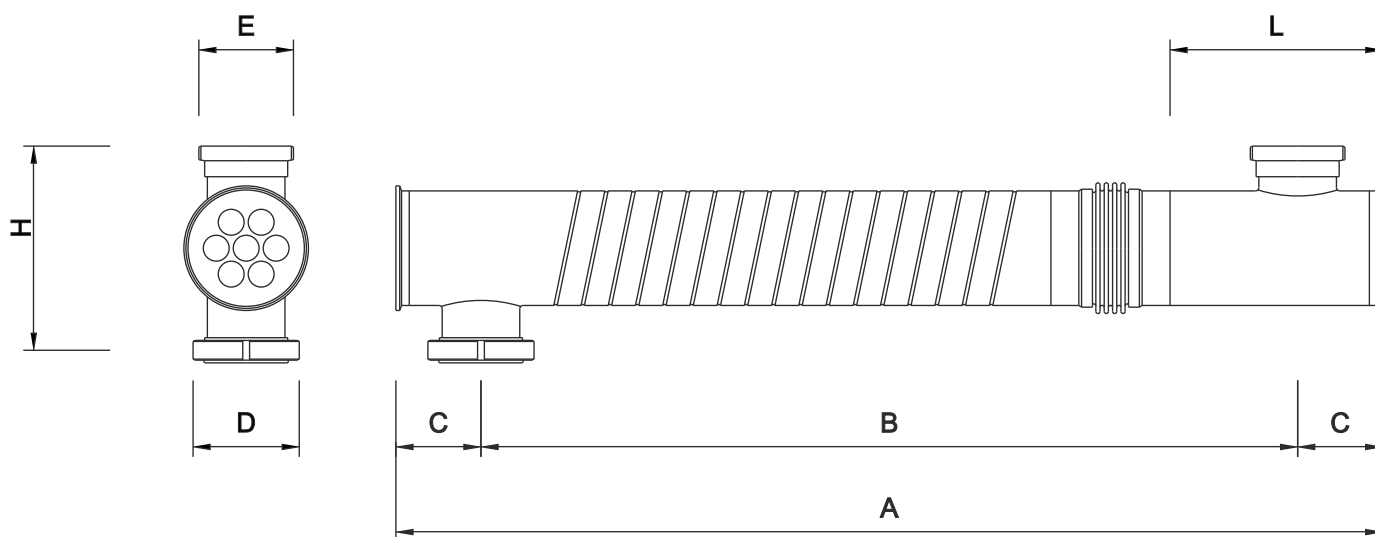
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-----------------------|-----------------------|---------------------------------|----------------------------------|----------------------------------|-------------|
| MLW 168 7 34 1 1000 | 14.54 | 4.81 | 0.68 | 14845.98 | 5283.37 | 30.8 |
| MLW 168 7 34 1 1500 | 21.97 | 7.45 | 1.05 | 14845.98 | 5283.37 | 39.0 |
| MLW 168 7 34 1 2000 | 29.39 | 10.09 | 1.43 | 14845.98 | 5283.37 | 47.3 |
| MLW 168 7 34 1 3000 | 44.24 | 15.37 | 2.18 | 14845.98 | 5283.37 | 63.8 |
| MLW 168 7 34 1 6000 | 88.77 | 31.22 | 4.42 | 14845.98 | 5283.37 | 113.4 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | | | | |
|---------------------|-----------------|--------------------|-----|-----|-----|-----|---|-----|-----|---|----|-----|------|--|--|------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| MLW 168 7 34 1 1000 | Shell / Tubes | | | 3.4 | | | | | | | | | 10.3 | | | | |
| MLW 168 7 34 1 1500 | Shell / Tubes | | 2.2 | | | | | | 6.7 | | | 9.1 | | | | | |
| MLW 168 7 34 1 2000 | Shell / Tubes | 1.7 | | | | 4.9 | | 6.8 | | | | | | | | | |
| MLW 168 7 34 1 3000 | Shell / Tubes | 1.1 | | | 3.2 | 4.5 | | | | | | | | | | | |
| MLW 168 7 34 1 6000 | Shell / Tubes | | 1.6 | 2.2 | | | | | 6.4 | | | | | | | 11.2 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 7 34 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 7 34 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 7 34 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 7 34 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 7 34 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

Sanitary mixflo multitube serie

Model **MLW 168 7 40**

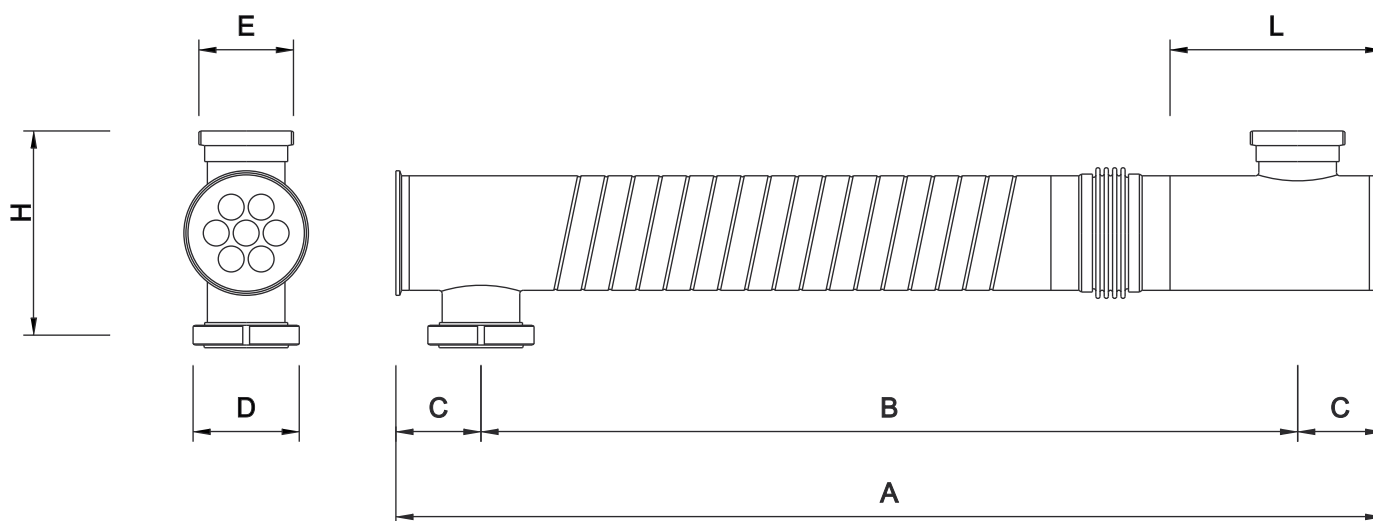
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|---------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 7 40 1 1000 | 12.32 | 6.85 | 0.80 | 12404.96 | 7526.47 | 32.2 |
| MLW 168 7 40 1 1500 | 18.53 | 10.61 | 1.24 | 12404.96 | 7526.47 | 41.2 |
| MLW 168 7 40 1 2000 | 24.73 | 14.38 | 1.68 | 12404.96 | 7526.47 | 50.2 |
| MLW 168 7 40 1 3000 | 37.13 | 21.90 | 2.56 | 12404.96 | 7526.47 | 68.3 |
| MLW 168 7 40 1 6000 | 74.35 | 44.48 | 5.20 | 12404.96 | 7526.47 | 122.6 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | | | | |
|---------------------|-------------------|--------------------|-----|-----|-----|-----|-----|---|---|-----|-----|----|------|--|--|--|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| MLW 168 7 40 1 1000 | Shell / Tubes | | | | 4.0 | | | | | 7.2 | | | | | | | |
| MLW 168 7 40 1 1500 | Shell / Tubes | | 2.6 | | | 4.7 | | | | | | | 10.7 | | | | |
| MLW 168 7 40 1 2000 | Shell / Tubes | | 2.0 | | 3.4 | | | | | | 8.0 | | | | | | |
| MLW 168 7 40 1 3000 | Shell / Tubes | 1.3 | | 2.2 | | | 5.3 | | | | | | 9.1 | | | | |
| MLW 168 7 40 1 6000 | Shell / Tubes | | 1.1 | 2.6 | | | 4.4 | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|---------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 7 40 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 7 40 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 7 40 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 7 40 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 7 40 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

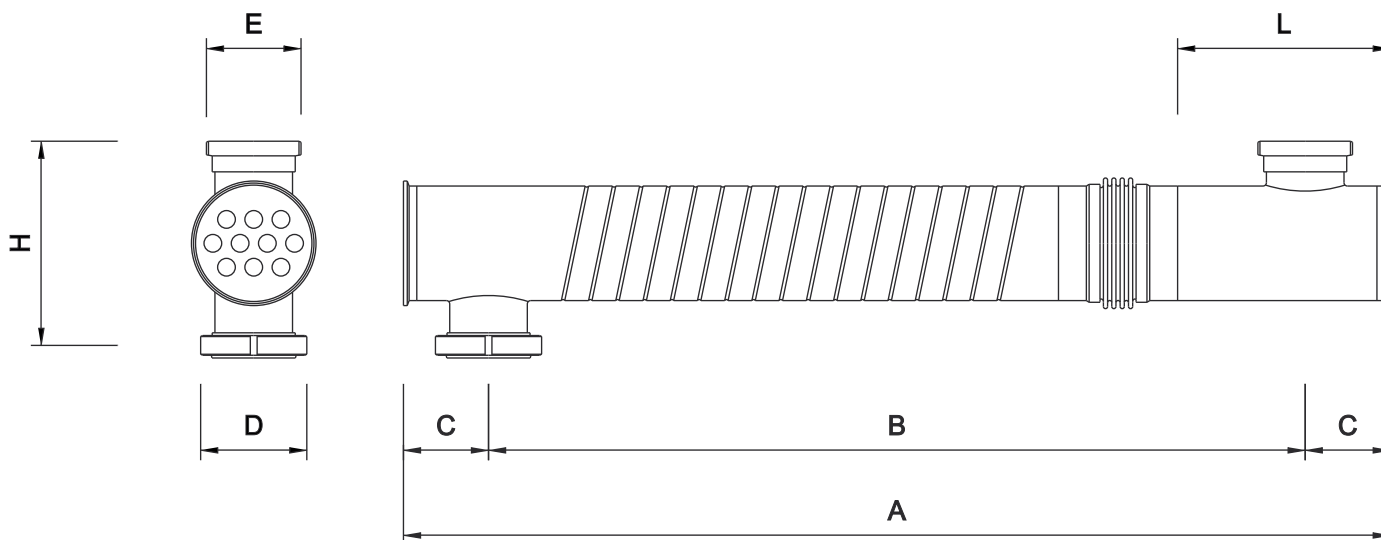
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 10 25 1 1000 | 15.72 | 3.59 | 0.73 | 16134.35 | 3940.81 | 31.1 |
| MLW 168 10 25 1 1500 | 23.78 | 5.56 | 1.13 | 16134.35 | 3940.81 | 39.6 |
| MLW 168 10 25 1 2000 | 31.85 | 7.53 | 1.52 | 16134.35 | 3940.81 | 48.1 |
| MLW 168 10 25 1 3000 | 47.99 | 11.47 | 2.32 | 16134.35 | 3940.81 | 65.0 |
| MLW 168 10 25 1 6000 | 96.39 | 23.29 | 4.72 | 16134.35 | 3940.81 | 115.9 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | |
|----------------------|-------------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|------|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| MLW 168 10 25 1 1000 | Shell / Tubes | | | 3.1 | | | | | | | | | 12.7 |
| MLW 168 10 25 1 1500 | Shell / Tubes | | 2.1 | | | | | | 8.4 | 8.9 | | | |
| MLW 168 10 25 1 2000 | Shell / Tubes | 1.5 | | | | | 6.2 | 6.6 | | | | | |
| MLW 168 10 25 1 3000 | Shell / Tubes | 1.0 | | | 4.1 | 4.3 | | | | | | | |
| MLW 168 10 25 1 6000 | Shell / Tubes | | 2.0 | 2.1 | | | | | | 8.5 | | 10.3 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 10 25 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 10 25 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 10 25 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 10 25 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 10 25 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

Sanitary mixflo multitube serie

Model MLW 168 10 28

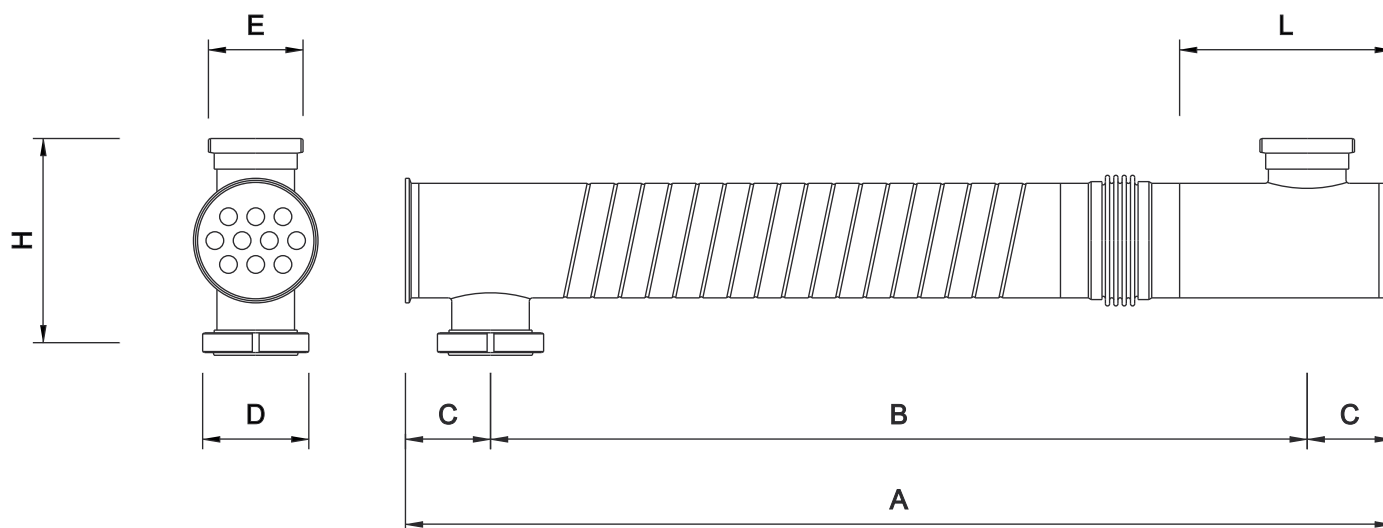
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 10 28 1 1000 | 14.72 | 4.47 | 0.80 | 15043.90 | 4908.74 | 32.0 |
| MLW 168 10 28 1 1500 | 22.25 | 6.92 | 1.24 | 15043.90 | 4908.74 | 41.0 |
| MLW 168 10 28 1 2000 | 29.77 | 9.38 | 1.68 | 15043.90 | 4908.74 | 49.9 |
| MLW 168 10 28 1 3000 | 44.81 | 14.28 | 2.56 | 15043.90 | 4908.74 | 67.8 |
| MLW 168 10 28 1 6000 | 89.94 | 29.01 | 5.20 | 15043.90 | 4908.74 | 121.6 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | |
|----------------------|-------------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|----|------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| MLW 168 10 28 1 1000 | Shell / Tubes | | | 3.3 | | | | | | | | | 11.1 | |
| MLW 168 10 28 1 1500 | Shell / Tubes | | 2.2 | | | | | | 7.2 | 8.9 | | | | |
| MLW 168 10 28 1 2000 | Shell / Tubes | 1.6 | | | | | 5.3 | 6.7 | | | | | | |
| MLW 168 10 28 1 3000 | Shell / Tubes | 1.1 | | | 3.5 | 4.4 | | | | | | | | |
| MLW 168 10 28 1 6000 | Shell / Tubes | | 1.7 | 2.2 | | | | | 6.8 | | | | 11.1 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 10 28 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 10 28 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 10 28 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 10 28 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 10 28 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

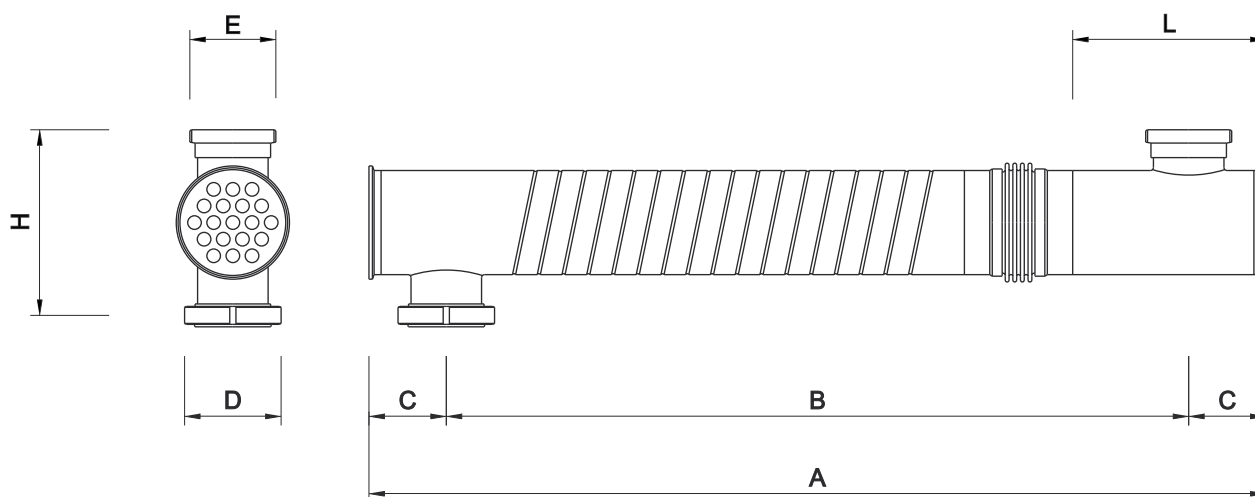
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 19 20 1 1000 | 14.90 | 4.40 | 1.09 | 15232.40 | 4834.91 | 31.2 |
| MLW 168 19 20 1 1500 | 22.51 | 6.82 | 1.68 | 15232.40 | 4834.91 | 39.7 |
| MLW 168 19 20 1 2000 | 30.13 | 9.23 | 2.28 | 15232.40 | 4834.91 | 48.2 |
| MLW 168 19 20 1 3000 | 45.36 | 14.07 | 3.47 | 15232.40 | 4834.91 | 65.2 |
| MLW 168 19 20 1 6000 | 91.06 | 28.57 | 7.06 | 15232.40 | 4834.91 | 116.3 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | |
|----------------------|-------------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|----|------|------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| MLW 168 19 20 1 1000 | Shell / Tubes | | | 3.3 | | | | | | | | | 11.3 | |
| MLW 168 19 20 1 1500 | Shell / Tubes | | 2.2 | | | | | | 7.3 | 8.8 | | | | |
| MLW 168 19 20 1 2000 | Shell / Tubes | 1.6 | | | | | 5.4 | 6.6 | | | | | | |
| MLW 168 19 20 1 3000 | Shell / Tubes | 1.1 | | | 3.5 | 4.4 | | | | | | | | |
| MLW 168 19 20 1 6000 | Shell / Tubes | | 1.7 | 2.1 | | | | | 7.0 | | | 10.9 | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 19 20 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 19 20 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 19 20 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 19 20 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 19 20 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

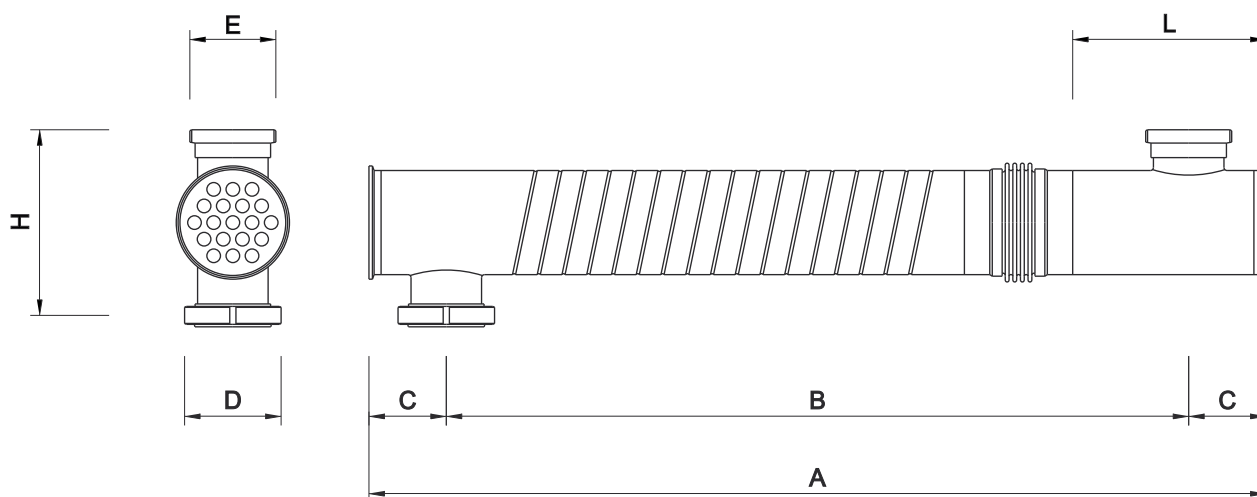
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 19 22 1 1000 | 13.76 | 5.43 | 1.19 | 13978.90 | 5969.03 | 32.0 |
| MLW 168 19 22 1 1500 | 20.74 | 8.42 | 1.85 | 13978.90 | 5969.03 | 41.0 |
| MLW 168 19 22 1 2000 | 27.73 | 11.40 | 2.51 | 13978.90 | 5969.03 | 50.0 |
| MLW 168 19 22 1 3000 | 41.71 | 17.37 | 3.82 | 13978.90 | 5969.03 | 68.0 |
| MLW 168 19 22 1 6000 | 83.65 | 35.28 | 7.76 | 13978.90 | 5969.03 | 121.8 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | | | | |
|----------------------|-------------------|--------------------|-----|-----|---|-----|-----|-----|-----|---|----|-----|----|--|--|------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| MLW 168 19 22 1 1000 | Shell / Tubes | | | 3.6 | | | | | | | | 9.2 | | | | | |
| MLW 168 19 22 1 1500 | Shell / Tubes | | 2.4 | | | | 5.9 | | | | | 9.6 | | | | | |
| MLW 168 19 22 1 2000 | Shell / Tubes | 1.8 | | | | 4.3 | | | 7.2 | | | | | | | | |
| MLW 168 19 22 1 3000 | Shell / Tubes | 1.1 | | 2.8 | | 4.7 | | | | | | | | | | 11.5 | |
| MLW 168 19 22 1 6000 | Shell / Tubes | | 1.4 | 2.3 | | | | 5.6 | | | | | | | | 11.9 | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 19 22 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 19 22 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 19 22 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 19 22 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 19 22 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

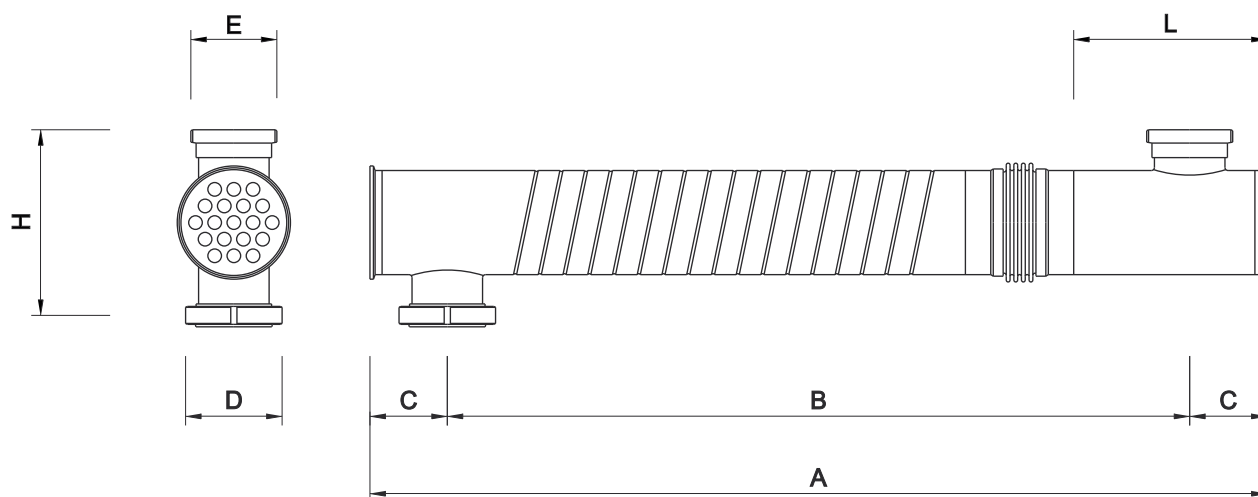
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 19 25 1 1000 | 11.57 | 6.81 | 1.38 | 11573.98 | 7487.55 | 38.4 |
| MLW 168 19 25 1 1500 | 17.35 | 10.56 | 2.14 | 11573.98 | 7487.55 | 50.8 |
| MLW 168 19 25 1 2000 | 23.14 | 14.30 | 2.90 | 11573.98 | 7487.55 | 63.3 |
| MLW 168 19 25 1 3000 | 34.71 | 21.79 | 4.41 | 11573.98 | 7487.55 | 88.2 |
| MLW 168 19 25 1 6000 | 69.44 | 44.25 | 8.96 | 11573.98 | 7487.55 | 162.9 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | | | | |
|----------------------|-------------------|--------------------|-----|-----|-----|-----|-----|-----|---|-----|-----|----|-----|--|--|------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| MLW 168 19 25 1 1000 | Shell / Tubes | | | | 4.3 | | | | | 7.3 | | | | | | | |
| MLW 168 19 25 1 1500 | Shell / Tubes | | 2.8 | | | 4.7 | | | | | | | | | | 11.5 | |
| MLW 168 19 25 1 2000 | Shell / Tubes | | 2.1 | | 3.4 | | | | | | 8.6 | | | | | | |
| MLW 168 19 25 1 3000 | Shell / Tubes | 1.4 | | 2.2 | | | | 5.7 | | | | | 9.1 | | | | |
| MLW 168 19 25 1 6000 | Shell / Tubes | | 1.1 | 2.8 | | | 4.5 | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 19 25 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 19 25 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 19 25 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 19 25 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 19 25 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

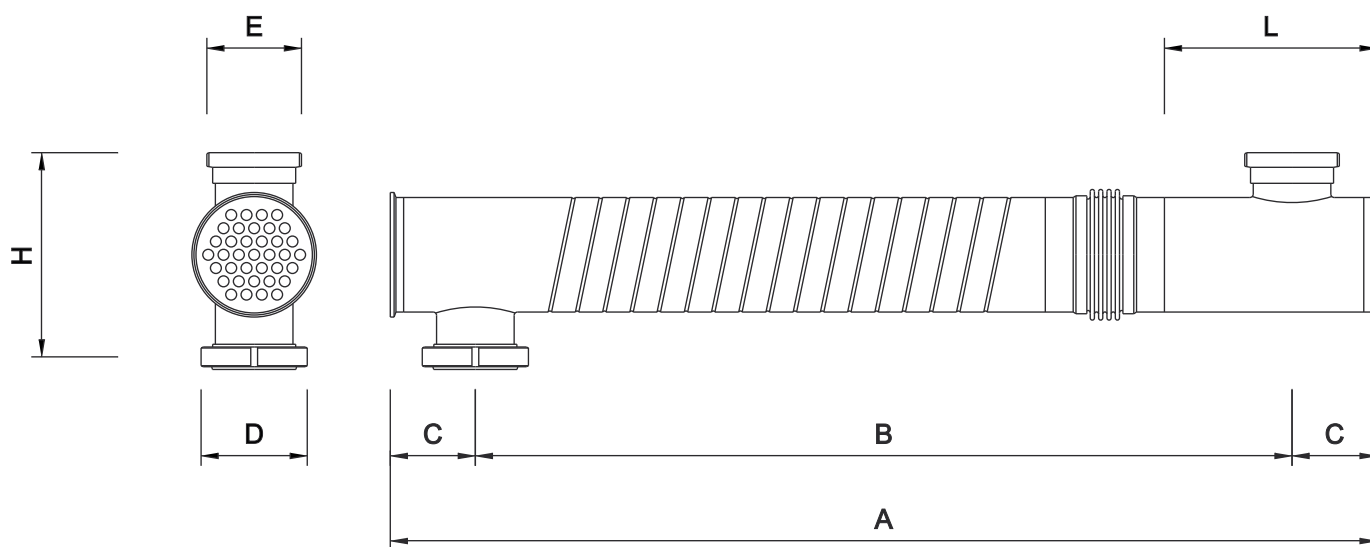
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 37 16 1 1000 | 13.56 | 5.18 | 1.69 | 13762.13 | 5695.71 | 35.5 |
| MLW 168 37 16 1 1500 | 20.44 | 8.03 | 2.62 | 13762.13 | 5695.71 | 46.4 |
| MLW 168 37 16 1 2000 | 27.32 | 10.88 | 3.55 | 13762.13 | 5695.71 | 57.3 |
| MLW 168 37 16 1 3000 | 41.08 | 16.57 | 5.41 | 13762.13 | 5695.71 | 79.2 |
| MLW 168 37 16 1 6000 | 82.37 | 33.66 | 10.99 | 13762.13 | 5695.71 | 144.6 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | | | |
|----------------------|-------------------|--------------------|-----|-----|---|-----|-----|-----|-----|---|-----|-----|----|--|--|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | |
| MLW 168 37 16 1 1000 | Shell / Tubes | | | 3.6 | | | | | | | | 9.6 | | | | |
| MLW 168 37 16 1 1500 | Shell / Tubes | | 2.4 | | | | | 6.2 | | | 9.7 | | | | | |
| MLW 168 37 16 1 2000 | Shell / Tubes | 1.8 | | | | 4.5 | | | 7.3 | | | | | | | |
| MLW 168 37 16 1 3000 | Shell / Tubes | 1.2 | | | | 3.0 | 4.8 | | | | | | | | | 12.0 |
| MLW 168 37 16 1 6000 | Shell / Tubes | | 1.4 | 2.4 | | | | | 5.9 | | | | | | | 12.1 |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 37 16 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 37 16 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 37 16 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 37 16 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 37 16 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

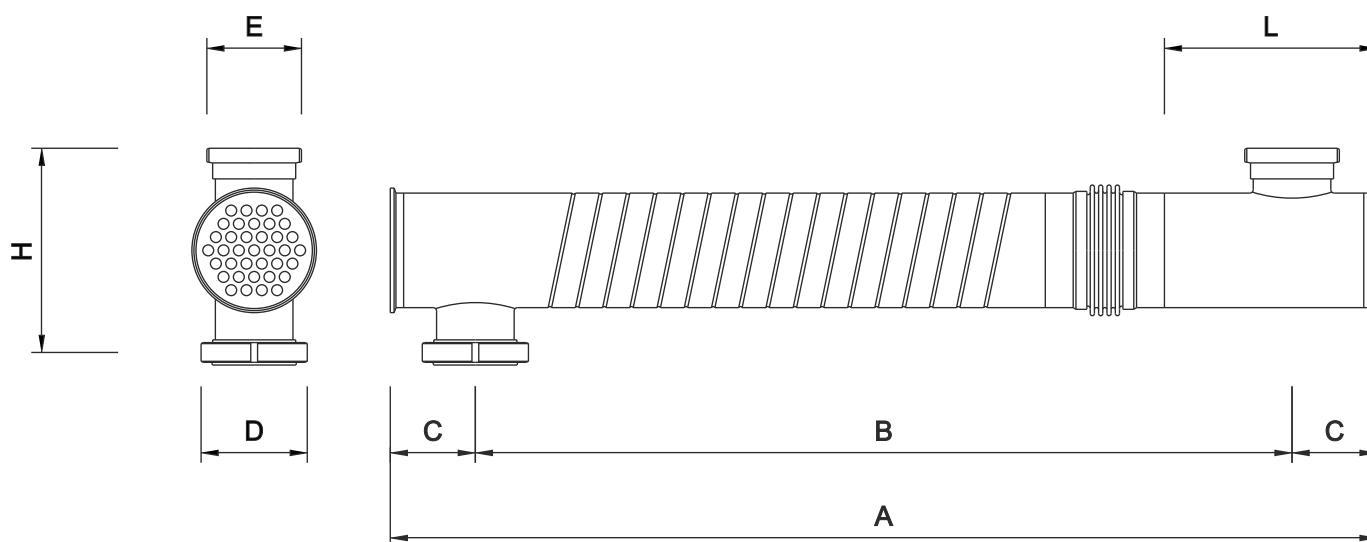
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 37 18 1 1000 | 11.76 | 6.77 | 1.90 | 11786.07 | 7439.29 | 37.2 |
| MLW 168 37 18 1 1500 | 17.65 | 10.49 | 2.95 | 11786.07 | 7439.29 | 49.0 |
| MLW 168 37 18 1 2000 | 23.55 | 14.21 | 4.00 | 11786.07 | 7439.29 | 60.8 |
| MLW 168 37 18 1 3000 | 35.33 | 21.65 | 6.09 | 11786.07 | 7439.29 | 84.5 |
| MLW 168 37 18 1 6000 | 70.69 | 43.97 | 12.37 | 11786.07 | 7439.29 | 155.3 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | | | | |
|----------------------|-------------------|--------------------|-----|-----|-----|-----|-----|-----|---|-----|-----|----|-----|--|--|------|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| MLW 168 37 18 1 1000 | Shell / Tubes | | | | 4.2 | | | | | 7.3 | | | | | | | |
| MLW 168 37 18 1 1500 | Shell / Tubes | | 2.8 | | | 4.2 | | | | | | | | | | 11.3 | |
| MLW 168 37 18 1 2000 | Shell / Tubes | | 2.1 | | 3.5 | | | | | | 8.4 | | | | | | |
| MLW 168 37 18 1 3000 | Shell / Tubes | 1.4 | | 2.3 | | | | 5.6 | | | | | 9.2 | | | | |
| MLW 168 37 18 1 6000 | Shell / Tubes | | 1.1 | 2.8 | | | 4.5 | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 37 18 1 1000 | 950 | 700 | 125 | DIN 11851 CLAMP 6" EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 37 18 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 37 18 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 37 18 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 37 18 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

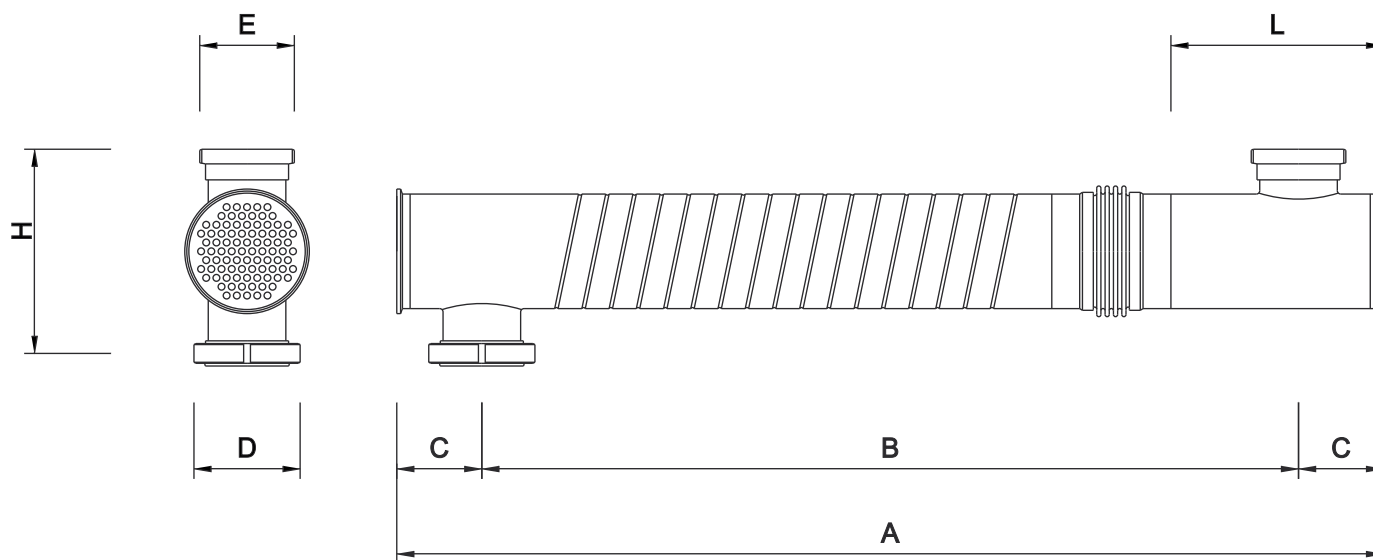
| MODEL | SHELL VOLUME [litres] | TUBES VOLUME [litres] | EXCHANGE AREA [m ²] | SHELL SECTION [mm ²] | TUBES SECTION [mm ²] | WEIGHT [kg] |
|----------------------|-------------------------|-------------------------|----------------------------------|-----------------------------------|-----------------------------------|---------------|
| MLW 168 88 12 1 1000 | 11.27 | 6.29 | 3.02 | 11248.86 | 6911.50 | 44.8 |
| MLW 168 88 12 1 1500 | 16.90 | 9.75 | 4.68 | 11248.86 | 6911.50 | 60.8 |
| MLW 168 88 12 1 2000 | 22.52 | 13.20 | 6.34 | 11248.86 | 6911.50 | 76.8 |
| MLW 168 88 12 1 3000 | 33.77 | 20.11 | 9.65 | 11248.86 | 6911.50 | 108.8 |
| MLW 168 88 12 1 6000 | 67.52 | 40.85 | 19.61 | 11248.86 | 6911.50 | 204.7 |

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

| MODEL | VOLUME [litres] | PRESSURE [bar] * | | | | | | | | | | | | | | | |
|----------------------|-------------------|--------------------|-----|-----|-----|---|-----|---|-----|-----|----|----|-----|--|------|--|--|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| MLW 168 88 12 1 1000 | Shell / Tubes | | | | 4.4 | | | | 7.9 | | | | | | | | |
| MLW 168 88 12 1 1500 | Shell / Tubes | | 2.9 | | | | 5.1 | | | | | | | | 11.8 | | |
| MLW 168 88 12 1 2000 | Shell / Tubes | | 2.2 | | 3.7 | | | | | 8.8 | | | | | | | |
| MLW 168 88 12 1 3000 | Shell / Tubes | 1.4 | | 2.4 | | | 5.9 | | | | | | 9.9 | | | | |
| MLW 168 88 12 1 6000 | Shell / Tubes | | 1.2 | 2.9 | | | 4.8 | | | | | | | | | | |

* for higher pressure contact MBS



| MODEL | DIMENSIONS [mm] | | | | | | |
|----------------------|-------------------|------|-----|--|---|-----|-------|
| | A | B | C | D | E | H | L |
| MLW 168 88 12 1 1000 | 950 | 700 | 125 | DIN 11851 DIN 32676 DN 150 EN 1092 - 1 DN 150 PN.16 more connections on demand | DIN 11851 DN 80-100 M/F CLAMP 3" o 4" more connections on demand | 300 | 312.5 |
| MLW 168 88 12 1 1500 | 1450 | 1200 | | | | | |
| MLW 168 88 12 1 2000 | 1950 | 1700 | | | | | |
| MLW 168 88 12 1 3000 | 2950 | 2700 | | | | | |
| MLW 168 88 12 1 6000 | 5950 | 5700 | | | | | |

Not binding technical datas; may be modified by the Manufactures without advise

Sanitary mixflo multitube serie

Codification

| | | | | | | | | | | |
|----------------------------|----|---|----|---|------|---|---|---|-------------------------------|---|
| MLW | 76 | 7 | 18 | 1 | 3000 | F | D | - | A | A |
| | | | | | | | | | Material | |
| | | | | | | | | | Product / Service | |
| | | | | | | | | | A - EN 1.4301 - AISI 304 | |
| | | | | | | | | | B - EN 1.4404 - AISI 316 L | |
| | | | | | | | | | Gaskets Material | |
| | | | | | | | | | S - SILICONE | |
| | | | | | | | | | V - VITON | |
| | | | | | | | | | N - NBR | |
| | | | | | | | | | E - EPDM | |
| | | | | | | | | | T - TEFLON | |
| | | | | | | | | | - GASKET'S NOT INCLUDED | |
| | | | | | | | | | Element connections | |
| | | | | | | | | | Product | |
| | | | | | | | | | Service | |
| | | | | | | | | | F - FLANGE EN - ANSI | |
| | | | | | | | | | D - DIN 11851 - DIN 11864 - 1 | |
| | | | | | | | | | C - CLAMP ISO 2852 - ASME BPE | |
| | | | | | | | | | - DIN 11864 - 2 - 3 | |
| | | | | | | | | | - DIN 32676 | |
| | | | | | | | | | S - SMS | |
| | | | | | | | | | B - BRITISH STANDARD MILK | |
| | | | | | | | | | A - WELDING CONNECTION | |
| | | | | | | | | | F - FLANGE EN - ANSI | |
| | | | | | | | | | G - GAS UNI 338 - RJT | |
| | | | | | | | | | Lenght [mm] | |
| | | | | | | | | | Expansion joint | |
| | | | | | | | | | 0 - Excluded | |
| | | | | | | | | | 1 - Included | |
| | | | | | | | | | Product diameter [mm] | |
| | | | | | | | | | Inner tubes number | |
| | | | | | | | | | Sheet diameter [mm] | |
| Multitube version | | | | | | | | | | |
| MLW - Total welded version | | | | | | | | | | |
| MLD - Disassembly version | | | | | | | | | | |