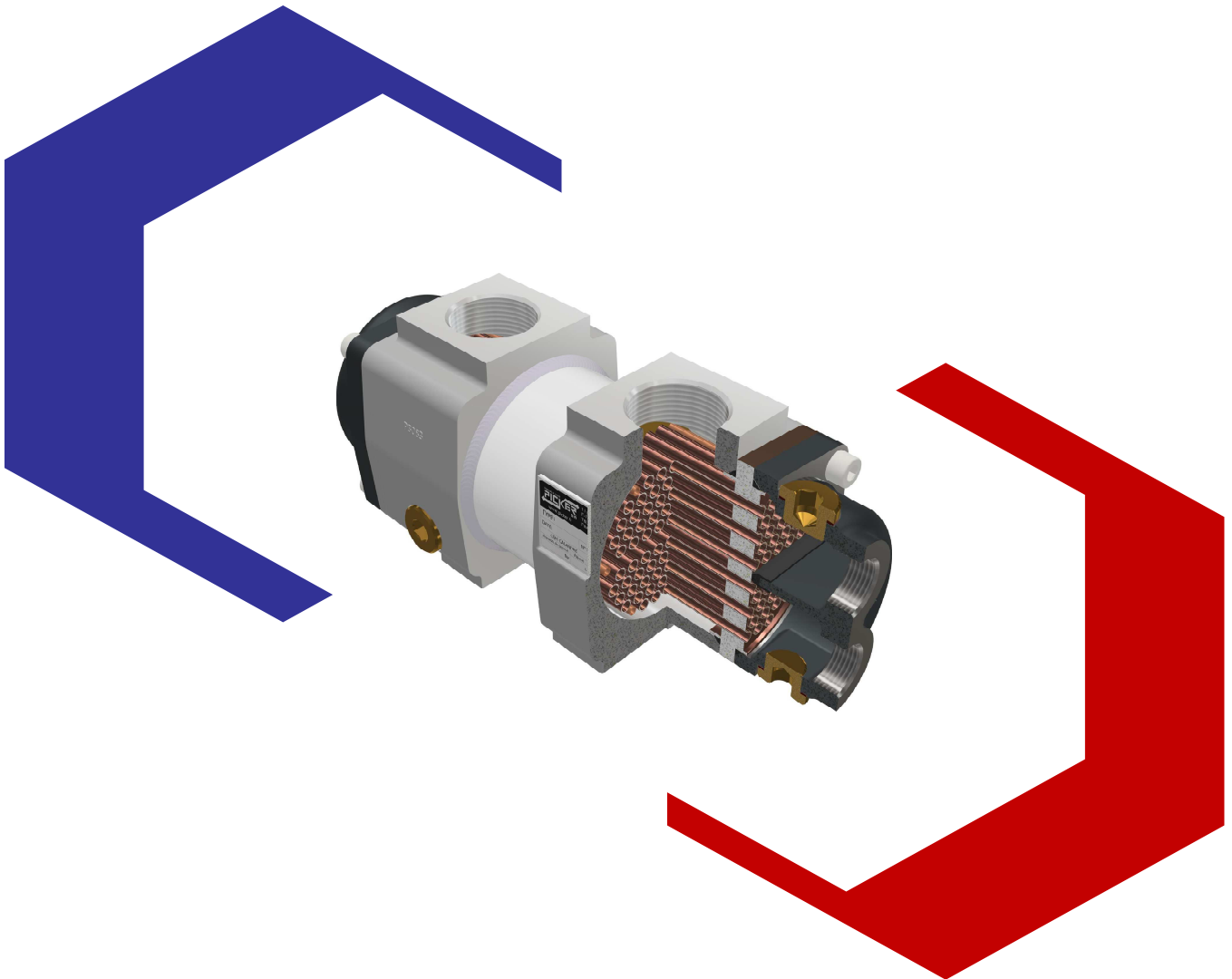


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MANUFACTURER

MULTITUBULAR HEAT EXCHANGERS



ÉCHANGEURS DE CHALEUR

PICKER



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MANUFACTURER

MULTITUBULAR HEAT EXCHANGERS

CATALOGUE



Shell diameter
89 mm

Exchange power
till 80 Kw



Shell diameter
126 mm

Exchange power
till 217 Kw



Shell diameter
150.5 mm

Exchange power
till 345 Kw



Shell diameter
205 mm

Exchange power
till 561 Kw



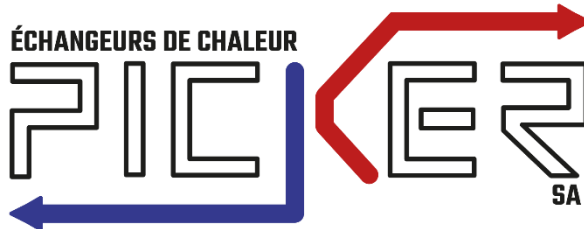
Shell diameter
226.5 mm

Exchange power
till 702 Kw



Shell diameter
270 mm

Exchange power
till 1116 Kw



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MANUFACTURER

MULTITUBULAR HEAT EXCHANGERS

CATALOGUE

HEAT EXCHANGERS FAMILIES

SHELL DIAMETER 89 MM

FAMILY T – **simple** passage tubes side – maxi flow rate **shell** side 190 l/mn – maxi flow rate **tubes** sides 380 l/mn – **exchange** surface 0.29 to 1.64 m²

FAMILY U – **double** passage tubes side – maxi flow rate **shell** side 210 l/mn – maxi flow rate **tubes** sides 100 l/mn – **exchange** surface 0.26 to 1.46 m²

SHELL DIAMETER 126 MM

FAMILY A – **simple** passage tubes side – maxi flow rate **shell** side 360 l/mn – maxi flow rate **tubes** sides 590 l/mn – **exchange** surface 0.92 to 6.17 m²

FAMILY B – **double** passage tubes side – maxi flow rate **shell** side 380 l/mn – maxi flow rate **tubes** sides 250 l/mn – **exchange** surface 0.85 to 5.70 m²

FAMILY L – **quadruple** passage tubes side – maxi flow rate **shell** side 380 l/mn – maxi flow rate **tubes** sides 100 l/mn – **exchange** surface 0.74 to 4.96 m²

SHELL DIAMETER 150.5 MM

FAMILY V – **simple** passage tubes side – maxi flow rate **shell** side 540 l/mn – maxi flow rate **tubes** sides 1 000 l/mn – **exchange** surface 1.55 to 10.02 m²

FAMILY W – **double** passage tubes side – maxi flow rate **shell** side 590 l/mn – maxi flow rate **tubes** sides 380 l/mn – **exchange** surface 1.45 to 9.35 m²

FAMILY X – **double** passage tubes side – maxi flow rate **shell** side 590 l/mn – maxi flow rate **tubes** sides 150 l/mn – **exchange** surface 1.34 to 8.68 m²

SHELL DIAMETER 205 MM

FAMILY Y – **simple** passage tubes side – maxi flow rate **shell** side 1 000 l/mn – maxi flow rate **tubes** sides 1 000 l/mn – **exchange** surface 2.77 to 17.69 m²

FAMILY K – **double** passage tubes side – maxi flow rate **shell** side 1 000 l/mn – maxi flow rate **tubes** sides 590 l/mn – **exchange** surface 2.73 to 17.39 m²

SHELL DIAMETER 226.5 MM

FAMILY Q – **simple** passage tubes side – maxi flow rate **shell** side 1 000 l/mn – maxi flow rate **tubes** sides 1 910 l/mn – **exchange** surface 4.92 to 25.98 m²

FAMILY M – **double** passage tubes side – maxi flow rate **shell** side 1 000 l/mn – maxi flow rate **tubes** sides 1 000 l/mn – **exchange** surface 4.82 to 25.48 m²

SHELL DIAMETER 270 MM

FAMILY O – **simple** passage tubes side – maxi flow rate **shell** side 1 910 l/mn – maxi flow rate **tubes** sides 1 910 l/mn – **exchange** surface 6.75 to 43.09 m²

FAMILY R – **double** passage tubes side – maxi flow rate **shell** side 1 910 l/mn – maxi flow rate **tubes** sides 1 000 l/mn – **exchange** surface 6.60 to 42.14 m²

Family T

For oil / water application
For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 89 MM

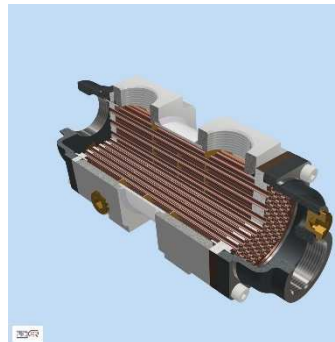
Max. admissible flow rate SHELL side (l/mn)		Max. admissible flow rate TUBES side (l/mn)	Exchange surface (m ²)
Baffles spacing		Bundle tubes material	
Narrow	Wide	Copper-nickel	
90	190	380	0.29 to 1.64

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	90	380	13 to 56
Wide	190	380	22 to 79

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D ¾ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	20	16
Testing	30	24

The PICKER heat exchangers are not subjected to the essential safety requirements of the « PRESSURE EQUIPEMENT DIRECTIVE » PED 2014/68/EU. They are manufactured in accordance with the « sound engineering practice » (Art. 4 §3 of this directive).

Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper-nickel	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper-nickel	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

MULTITUBULAR HEAT EXCHANGERS

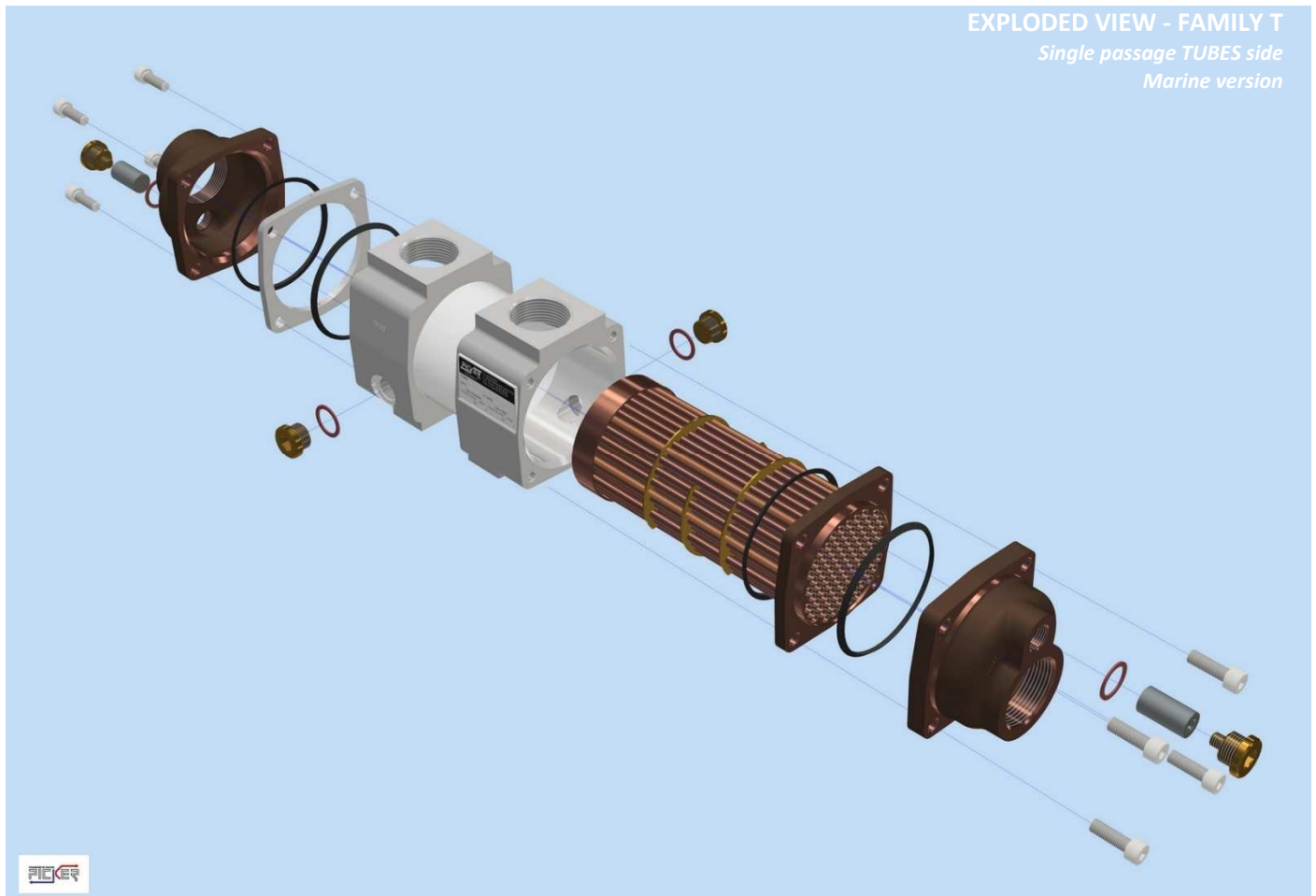
Family T

For oil / water application
 For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 89 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
T05	0.29	0.5	0.6	294
T06	0.35	0.6	0.7	331
T07	0.43	0.7	0.8	376
T08	0.53	0.9	0.9	430
T09	0.64	1.0	1.0	495
T10	0.77	1.3	1.1	572
T11	0.93	1.5	1.3	665
T12	1.13	1.8	1.5	777
T13	1.36	2.2	1.8	911
T14	1.64	2.7	2.0	1072

Shell tube diameter (mm) : 89
 Connections with tapped holes SHELL side and TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

MULTITUBULAR HEAT EXCHANGERS Family U

For oil / water application
For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 89 MM

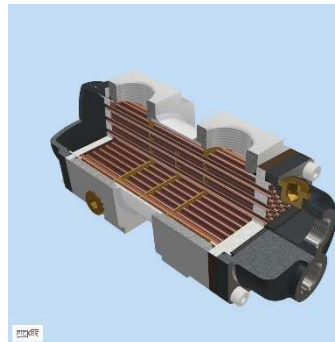
Max. admissible flow rate SHELL side (l/mn)		Max. admissible flow rate TUBES side (l/mn)	Exchange surface (m ²)
Baffles spacing		Bundle tubes material	
Narrow	Wide	Copper-nickel	
110	210	100	0.26 to 1.46

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	110	100	13 to 54
Wide	210	100	19 to 69

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D ¾ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	20	16
Testing	30	24

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Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper-nickel	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper-nickel	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

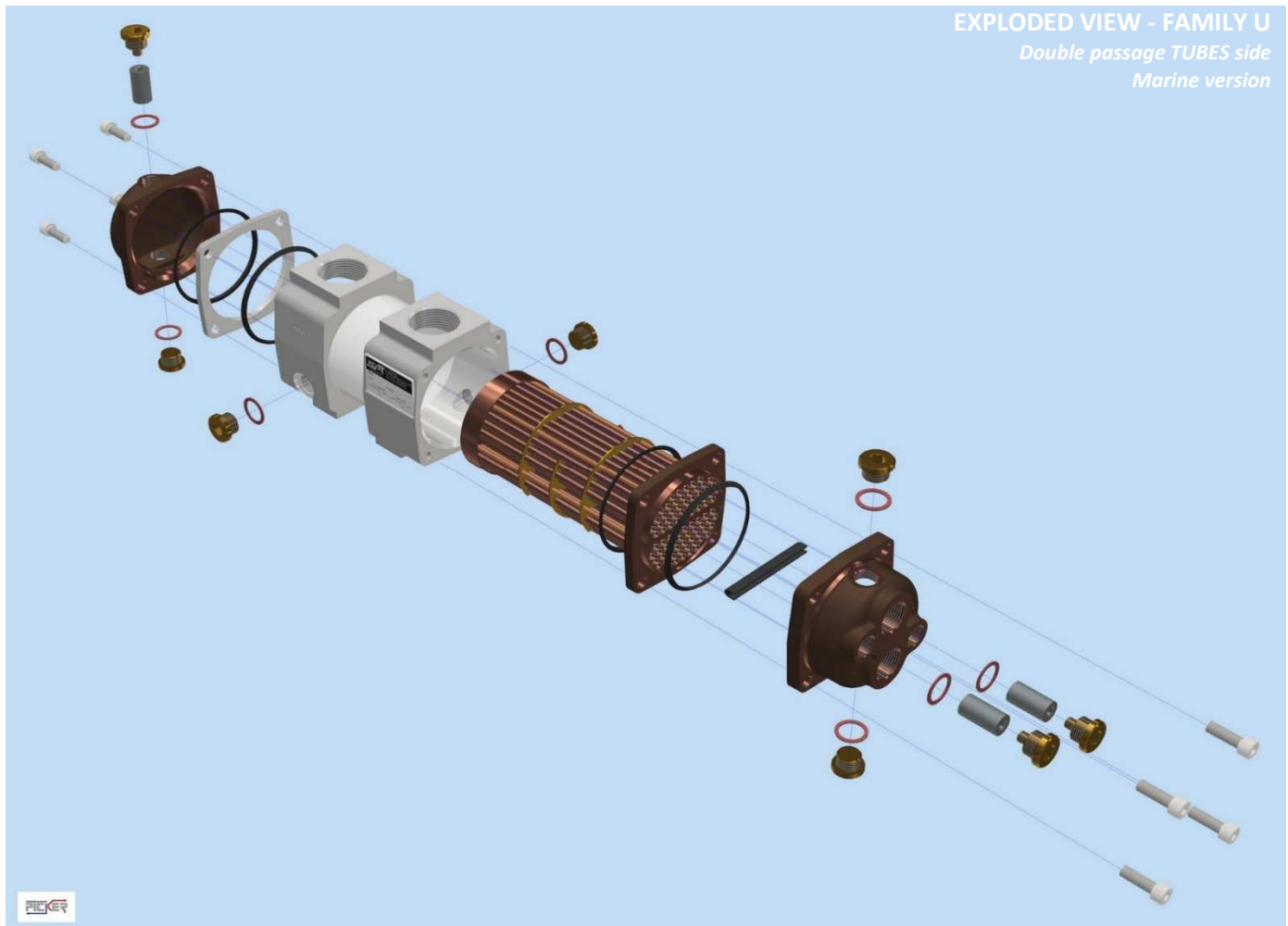
MULTITUBULAR HEAT EXCHANGERS Family U

For oil / water application
 For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 89 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
U05	0.26	0.5	0.6	283
U06	0.32	0.6	0.7	320
U07	0.38	0.8	0.8	365
U08	0.47	0.9	0.9	419
U09	0.57	1.1	1.0	484
U10	0.69	1.4	1.1	561
U11	0.83	1.7	1.2	654
U12	1.00	2.0	1.4	766
U13	1.21	2.4	1.6	900
U14	1.46	2.9	1.9	1061

Shell tube diameter (mm) : 89
 Connections with tapped holes SHELL side and TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

Family A

For oil / water application
For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 126 MM

Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)	Exchange surface (m ²)
Baffles spacing			Bundle tubes material	
Narrow	Medium	Wide	Copper-nickel	
160	250	360	590	0.92 to 6.17

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	160	590	37 to 135
Medium	250	590	45 to 186
Wide	360	590	56 to 217

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D 1/2 cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D 1/2 cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

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Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper-nickel	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper-nickel	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

MULTITUBULAR HEAT EXCHANGERS

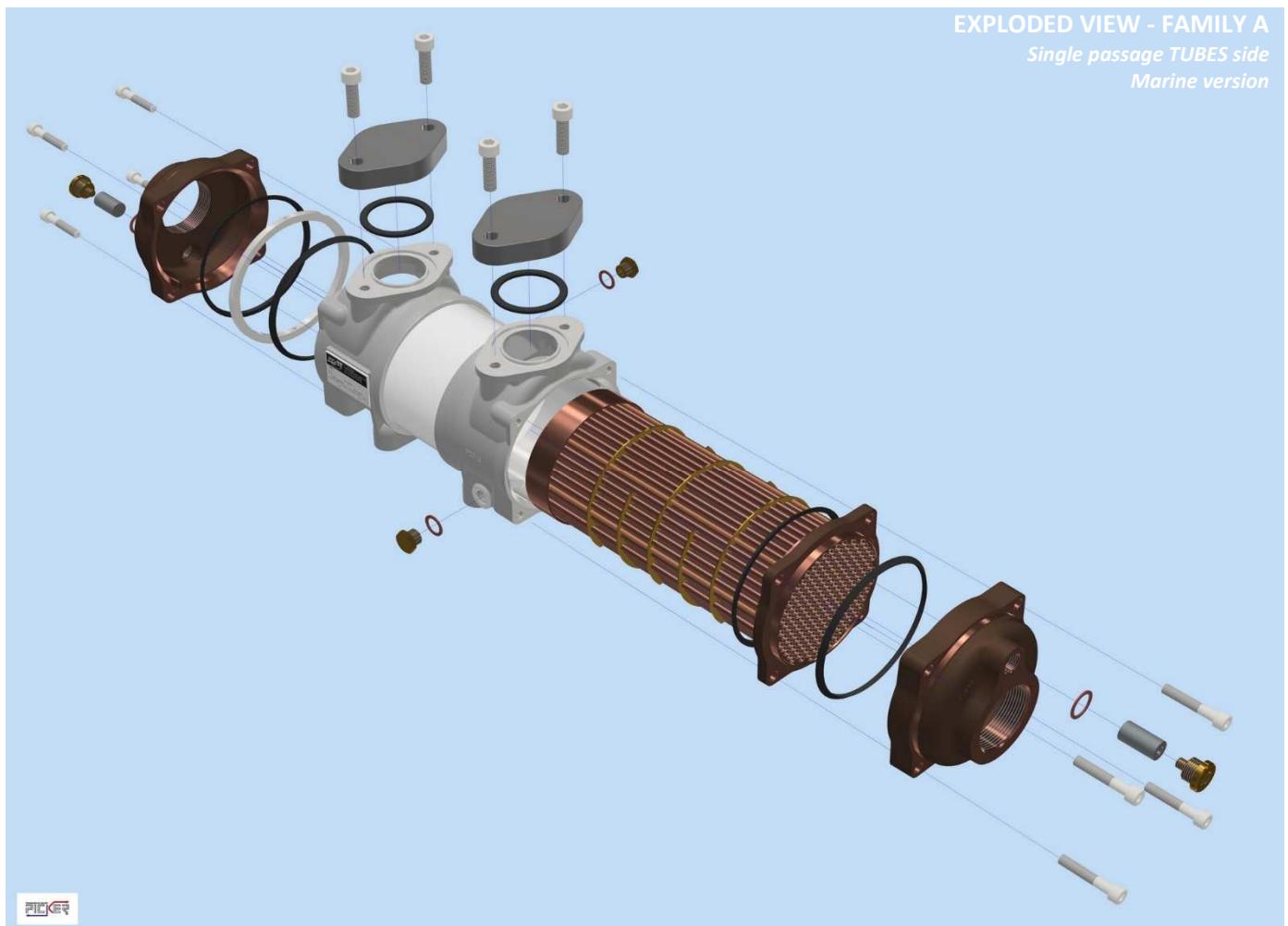
Family A

For oil / water application
 For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 126 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
A07	0.92	1.4	1.9	376
A08	1.13	1.7	2.2	430
A09	1.37	2.0	2.4	495
A10	1.66	2.5	2.7	572
A11	2.01	3.0	3.1	665
A12	2.43	3.6	3.5	777
A13	2.93	4.4	4.0	911
A14	3.53	5.2	4.7	1072
A15	4.25	6.3	5.4	1264
A16	5.12	7.6	6.3	1496
A17	6.17	9.2	7.4	1774

Shell tube diameter (mm) : 126
 Connections with counter-flanges SHELL side / Tapped holes TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

MULTITUBULAR HEAT EXCHANGERS Family B

For oil / water application
For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 126 MM

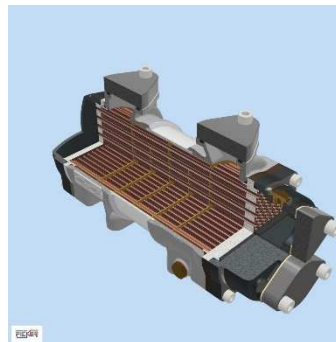
Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)	Exchange surface (m ²)
Baffles spacing			Bundle tubes material	
Narrow	Medium	Wide	Copper-nickel	
180	270	380	250	0.85 to 5.70

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	180	250	37 to 134
Medium	270	250	43 to 172
Wide	380	250	52 to 193

For any other case or application, we recommend to consult PICKER S.A.



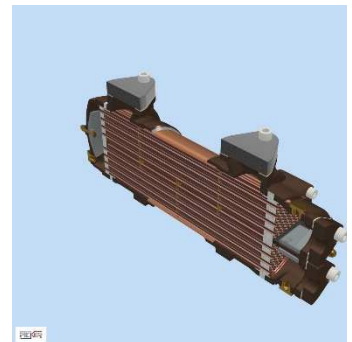
3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

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Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper-nickel	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper-nickel	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

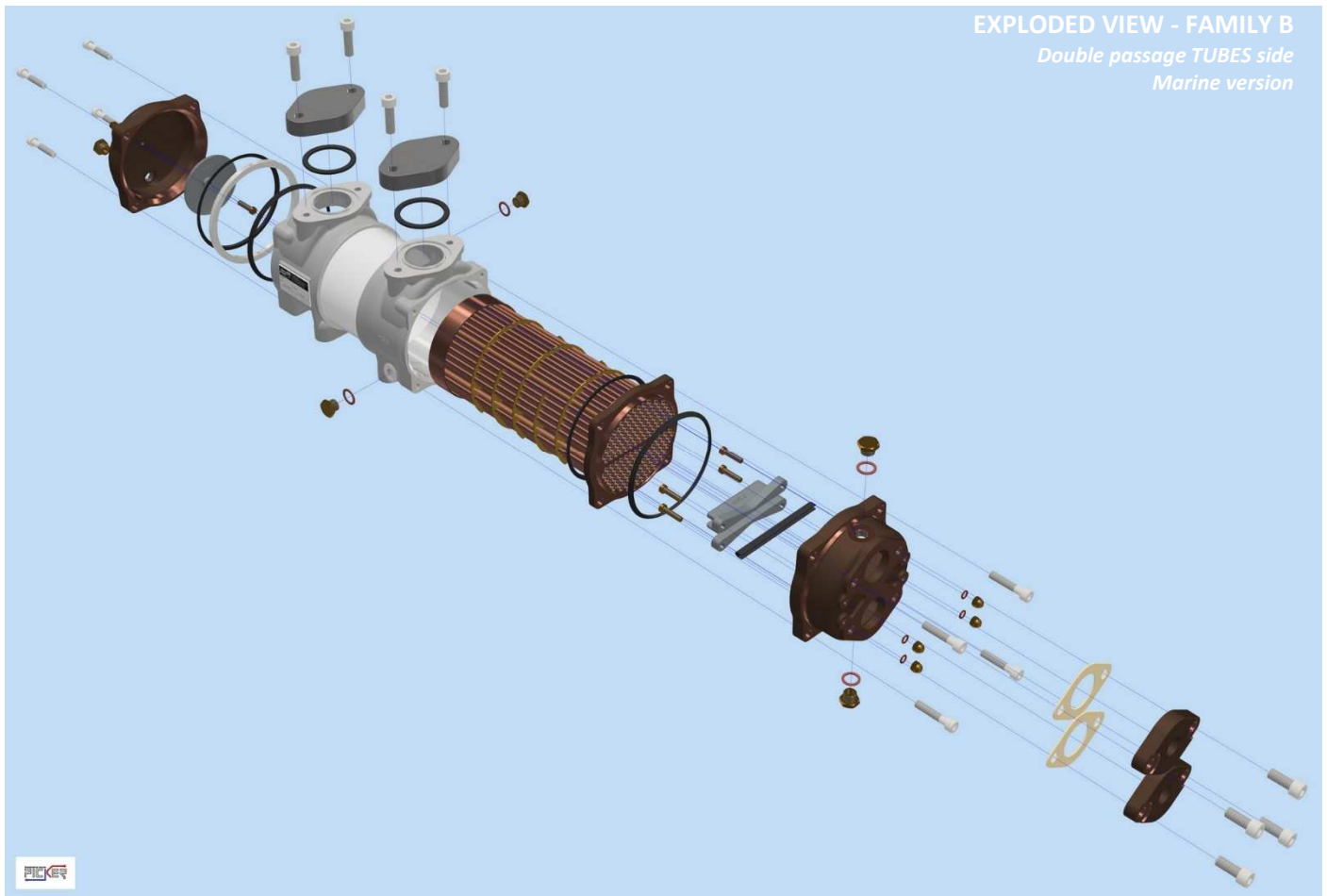
MULTITUBULAR HEAT EXCHANGERS
Family B

For oil / water application
 For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 126 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
B07	0.85	1.5	1.7	398
B08	1.04	1.8	1.9	452
B09	1.27	2.2	2.2	517
B10	1.53	2.6	2.5	594
B11	1.86	3.2	2.8	687
B12	2.24	3.9	3.2	799
B13	2.71	4.7	3.7	933
B14	3.27	5.6	4.3	1094
B15	3.93	6.8	5.0	1286
B16	4.74	8.2	5.8	1518
B17	5.70	9.8	6.8	1796

Shell tube diameter (mm) : 126
 Connections with counter-flanges SHELL side and TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

Family L

For oil / water application
For water / water application

Quadruple passage TUBES side
SHELL TUBE DIAMETER 126 MM

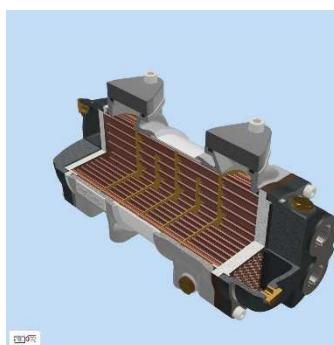
Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)	Exchange surface (m ²)
Baffles spacing			Bundle tubes material	
Narrow	Medium	Wide	Copper-nickel	
200	310	380	100	0.74 to 4.96

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	200	100	32 to 116
Medium	310	100	34 to 137
Wide	380	100	37 to 131

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D 1/2 cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D 1/2 cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

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Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper-nickel	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper-nickel	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

MULTITUBULAR HEAT EXCHANGERS

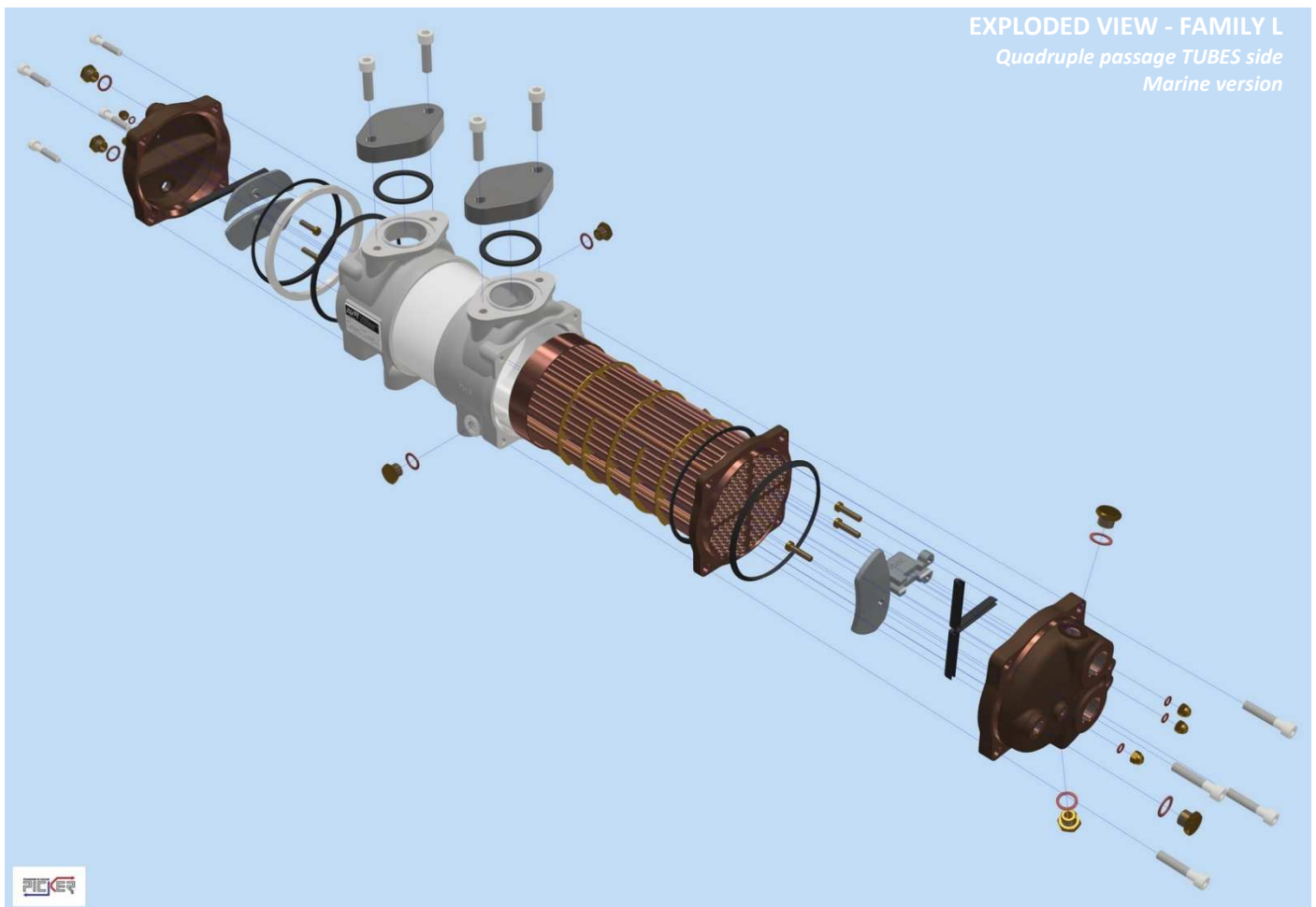
Family L

For oil / water application
 For water / water application

Quadruple passage TUBES side
SHELL TUBE DIAMETER 126 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
L07	0.74	1.6	1.6	385
L08	0.90	2.0	1.8	439
L09	1.10	2.4	2.0	504
L10	1.33	2.9	2.2	581
L11	1.61	3.6	2.5	674
L12	1.95	4.3	2.9	786
L13	2.36	5.2	3.3	920
L14	2.84	6.3	3.8	1081
L15	3.42	7.6	4.4	1273
L16	4.12	9.1	5.1	1505
L17	4.96	11.0	6.0	1783

Shell tube diameter (mm) : 126
 Connections with counter-flanges SHELL side / Tapped holes TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

MULTITUBULAR HEAT EXCHANGERS Family V

For oil / water application
For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 150.5 MM

Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)	Exchange surface (m ²)
Baffles spacing			Bundle tubes material	
Narrow	Medium	Wide	Copper-nickel	
280	420	540	1000	1.55 to 10.02

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	280	1000	66 to 234
Medium	420	1000	77 to 302
Wide	540	1000	120 to 345
For any other case or application, we recommend to consult PICKER S.A.			



3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15
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Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper-nickel	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper-nickel	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

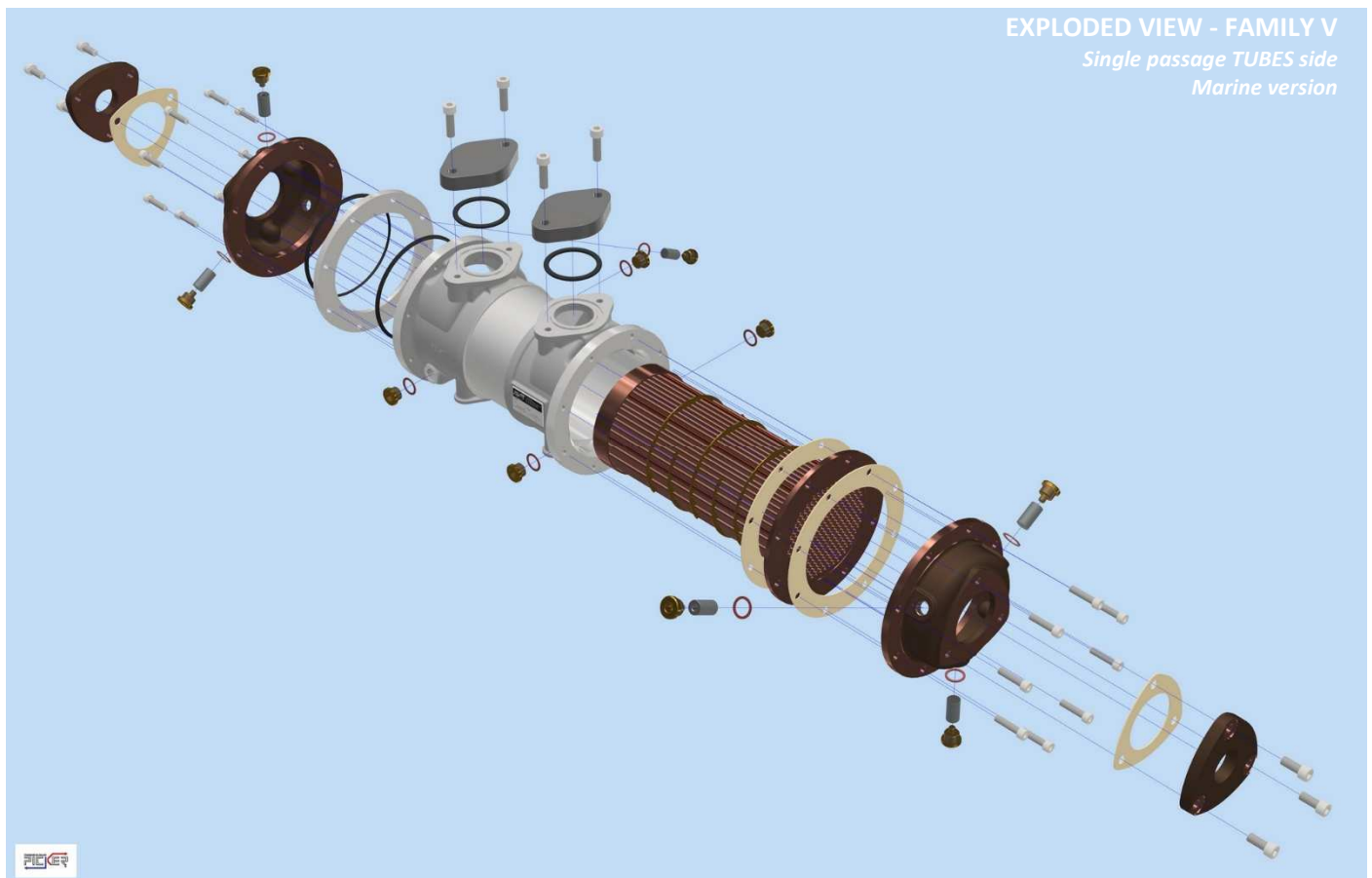
MULTITUBULAR HEAT EXCHANGERS

Family V

For oil / water application
 For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 150.5 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
V08	1.55	2.5	3.0	491
V09	1.88	3.0	3.4	556
V10	2.27	3.6	3.8	633
V11	2.74	4.4	4.3	726
V12	3.30	5.3	4.9	838
V13	3.98	6.3	5.6	972
V14	4.79	7.6	6.4	1133
V15	5.76	9.2	7.4	1325
V16	6.94	11.0	8.6	1557
V17	8.34	13.3	10.1	1835
V18	10.02	15.9	11.9	2168
Shell tube diameter (mm) : 150.5				
Connections with counter-flanges SHELL side and TUBES side				



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

Family W

For oil / water application
For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 150.5 MM

Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)	Exchange surface (m ²)
Baffles spacing			Bundle tubes material	
Narrow	Medium	Wide	Copper-nickel	
300	450	590	380	1.45 to 9.35

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	300	380	63 to 220
Medium	450	380	72 to 276
Wide	590	380	99 to 297

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

The PICKER heat exchangers are not subjected to the essential safety requirements of the « PRESSURE EQUIPEMENT DIRECTIVE » PED 2014/68/EU. They are manufactured in accordance with the « sound engineering practice » (Art. 4 §3 of this directive).

Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper-nickel	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper-nickel	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

MULTITUBULAR HEAT EXCHANGERS

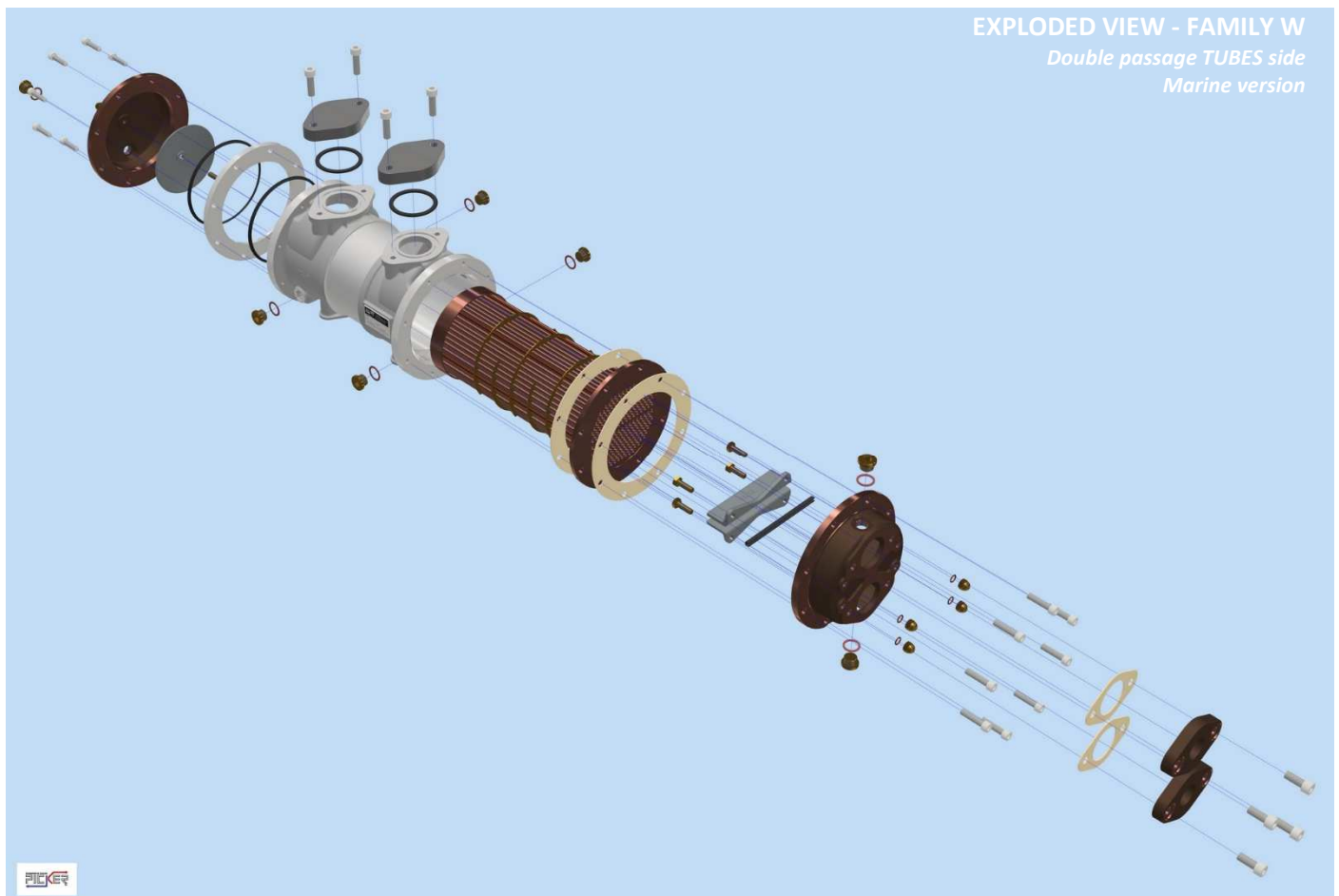
Family W

For oil / water application
 For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 150.5 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
W08	1.45	2.6	2.8	464
W09	1.75	3.2	3.2	529
W10	2.12	3.8	3.5	606
W11	2.55	4.6	4.0	699
W12	3.08	5.6	4.5	811
W13	3.71	6.7	5.2	945
W14	4.47	8.1	6.0	1106
W15	5.38	9.8	6.9	1298
W16	6.47	11.7	8.1	1530
W17	7.78	14.1	9.4	1808
W18	9.35	17.0	11.1	2141

Shell tube diameter (mm) : 150.5
 Connections with counter-flanges SHELL side and TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

MULTITUBULAR HEAT EXCHANGERS Family X

For oil / water application
For water / water application

Quadruple passage TUBES side
SHELL TUBE DIAMETER 150.5 MM

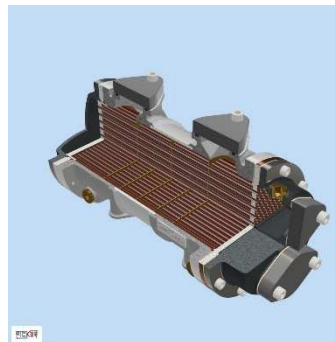
Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)	Exchange surface (m ²)
Baffles spacing			Bundle tubes material	
Narrow	Medium	Wide	Copper-nickel	
310	460	590	150	1.34 to 8.68

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	310	150	56 to 184
Medium	460	150	60 to 210
Wide	590	150	81 to 219

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

The PICKER heat exchangers are not subjected to the essential safety requirements of the « PRESSURE EQUIPEMENT DIRECTIVE » PED 2014/68/EU. They are manufactured in accordance with the « sound engineering practice » (Art. 4 §3 of this directive).

Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper-nickel	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper-nickel	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

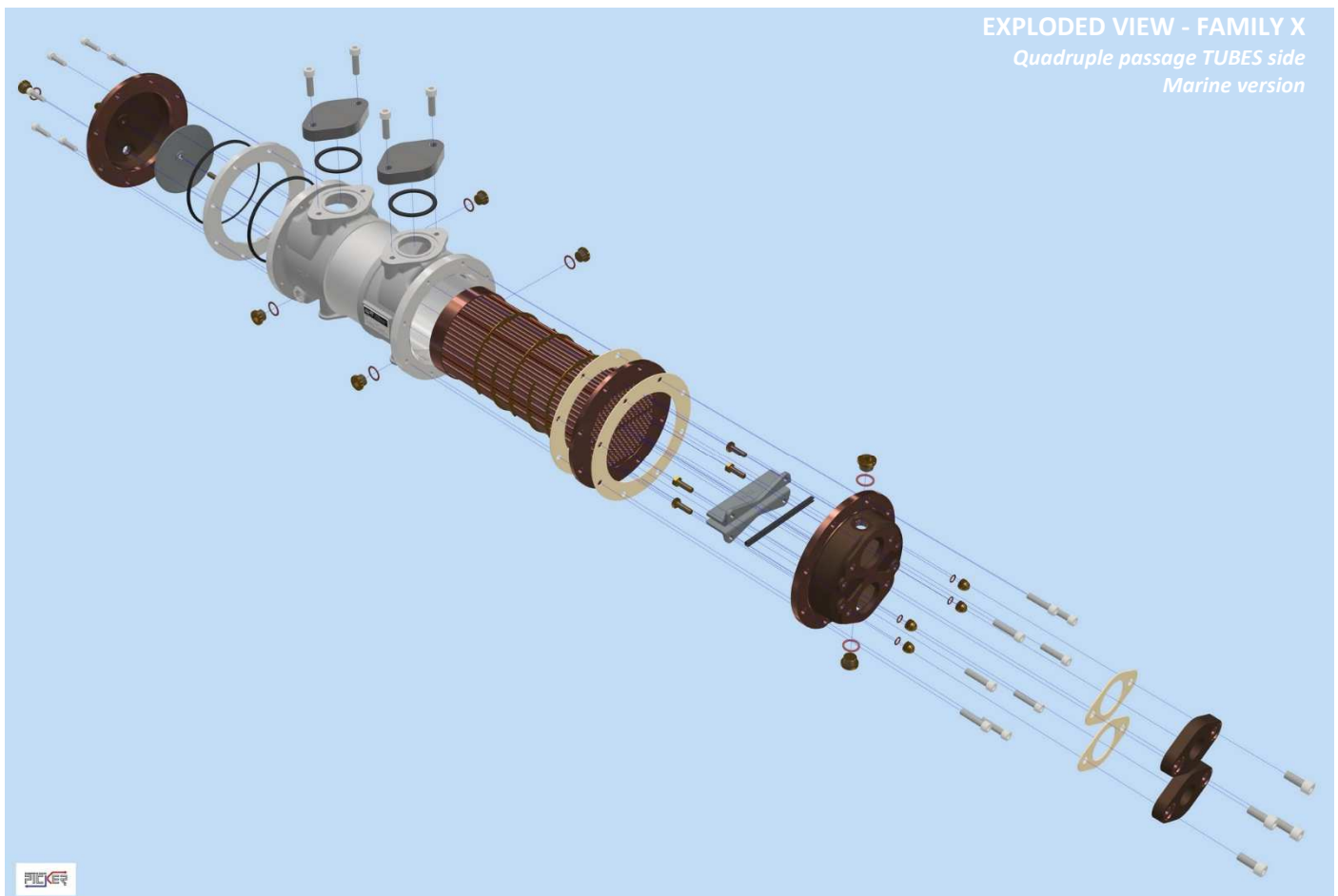
MULTITUBULAR HEAT EXCHANGERS Family X

For oil / water application
 For water / water application

Quadruple passage TUBES side
 SHELL TUBE DIAMETER 150.5 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
X08	1.34	2.8	2.7	436
X09	1.63	3.4	3.0	501
X10	1.96	4.1	3.4	578
X11	2.37	4.9	3.8	671
X12	2.86	5.9	4.3	783
X13	3.45	7.1	4.9	917
X14	4.15	8.6	5.6	1078
X15	4.99	10.3	6.5	1270
X16	6.00	12.4	7.6	1502
X17	7.22	15.0	8.8	1780
X18	8.68	18.0	10.4	2113

Shell tube diameter (mm) : 150.5
 Connections with counter-flanges SHELL side / Tapped holes TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

Family Y

For oil / water application
For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 205 MM

Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)		Exchange surface (m ²)
Baffles spacing			Bundle tubes material		
Narrow	Medium	Wide	Copper	Copper-nickel	
500	700	1000	750	1000	2.77 to 17.69

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	500	1000	99 to 382
Medium	700	1000	136 to 466
Wide	1000	1000	211 to 561

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

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Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

MULTITUBULAR HEAT EXCHANGERS

Family Y

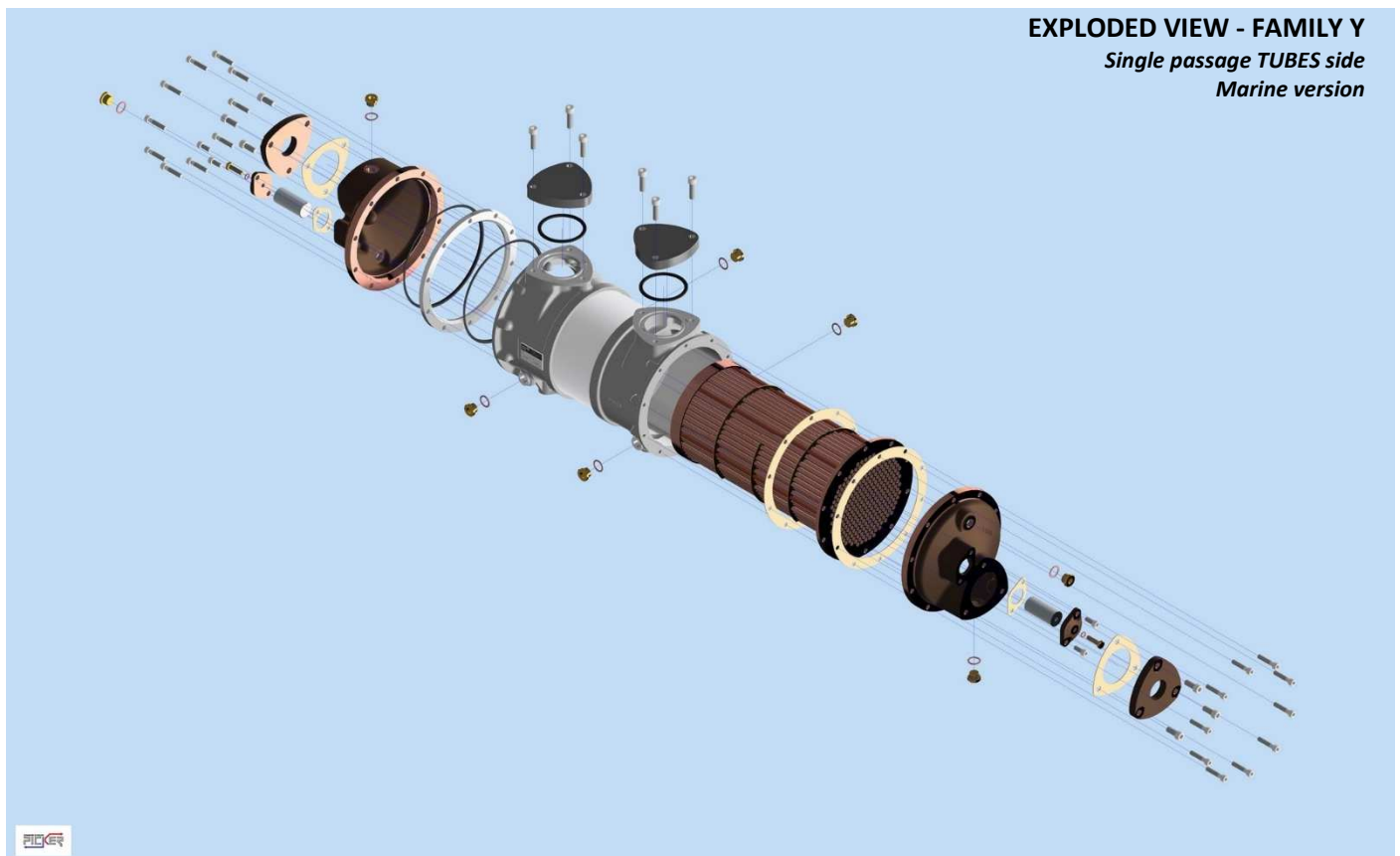
**For oil / water application
 For water / water application**

**Single passage TUBES side
 SHELL TUBE DIAMETER 205 MM**

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
Y09	2.77	5.5	9.2	632
Y10	3.34	6.7	10.0	709
Y11	4.03	8.0	11.1	802
Y12	4.86	9.7	12.4	914
Y13	5.86	11.7	13.9	1048
Y14	7.05	14.1	15.7	1209
Y15	8.47	16.9	17.9	1401
Y16	10.19	20.3	20.5	1633
Y17	12.26	24.4	23.7	1911
Y18	14.72	29.4	27.5	2244
Y19	17.69	35.3	32.0	2644

Shell tube diameter (mm) : 205

Connections with counter-flanges SHELL side and TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

Family K

For oil / water application
For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 205 MM

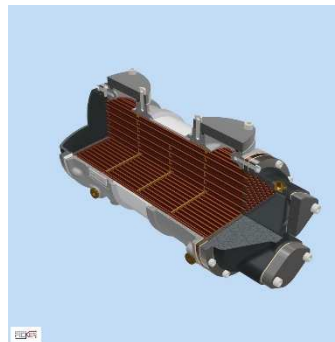
Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)		Exchange surface (m ²)
Baffles spacing			Bundle tubes material		
Narrow	Medium	Wide	Copper	Copper-nickel	
480	710	1000	370	590	2.73 to 17.39

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	480	590	96 to 347
Medium	710	590	139 to 443
Wide	1000	590	209 to 519

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

The PICKER heat exchangers are not subjected to the essential safety requirements of the « PRESSURE EQUIPEMENT DIRECTIVE » PED 2014/68/EU. They are manufactured in accordance with the « sound engineering practice » (Art. 4 §3 of this directive).

Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

MULTITUBULAR HEAT EXCHANGERS

Family K

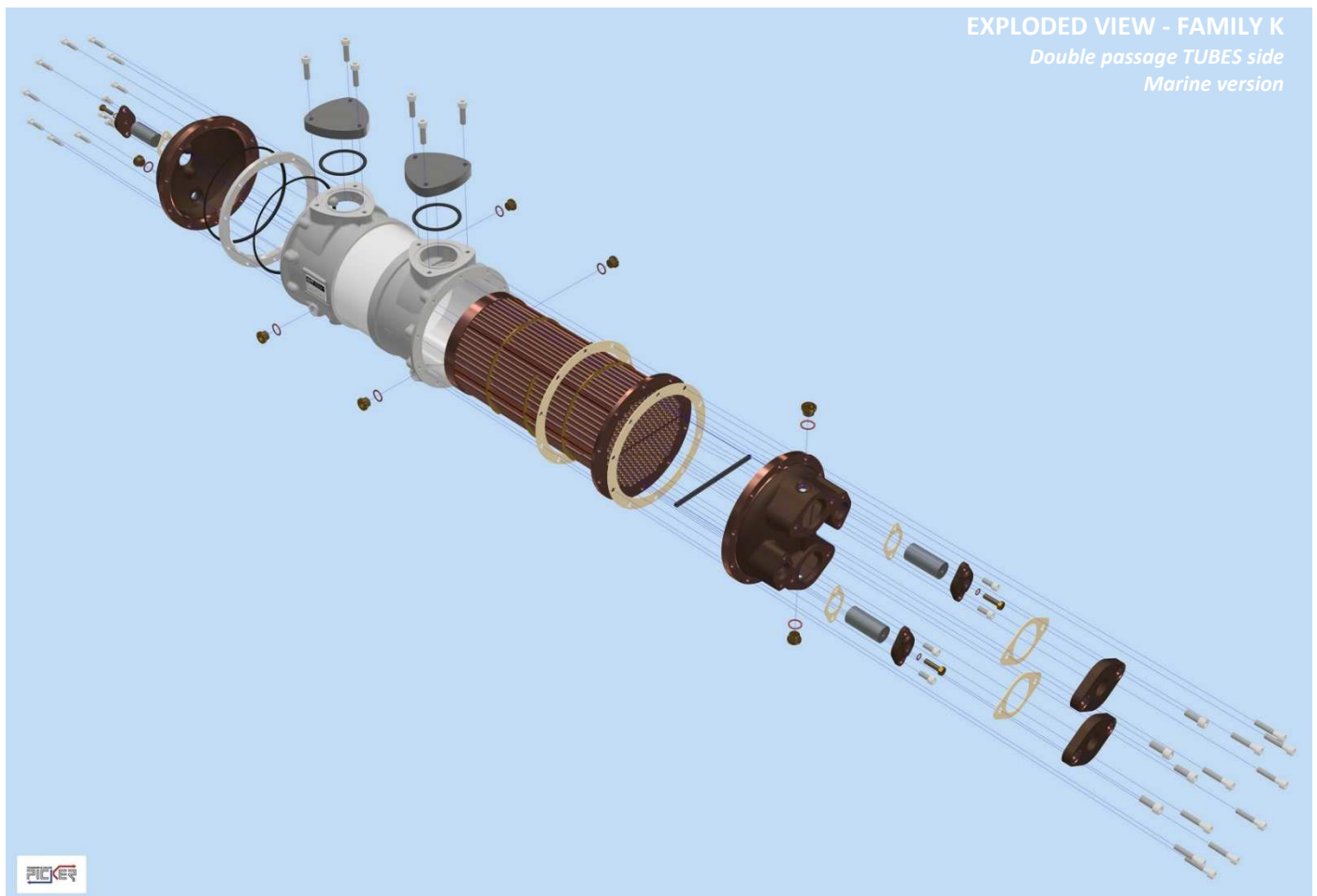
**For oil / water application
 For water / water application**

**Double passage TUBES side
 SHELL TUBE DIAMETER 205 MM**

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
K09	2.73	5.6	8.5	619
K10	3.29	6.8	9.4	696
K11	3.96	8.2	10.4	789
K12	4.78	9.9	11.6	901
K13	5.76	11.9	13.1	1035
K14	6.93	14.3	14.9	1196
K15	8.33	17.2	17.1	1388
K16	10.02	20.7	19.7	1620
K17	12.05	24.9	22.8	1898
K18	14.47	29.9	26.5	2231
K19	17.39	35.9	31.0	2631

Shell tube diameter (mm) : 205

Connections with counter-flanges SHELL side and TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

MULTITUBULAR HEAT EXCHANGERS Family Q

For oil / water application
For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 226.5 MM

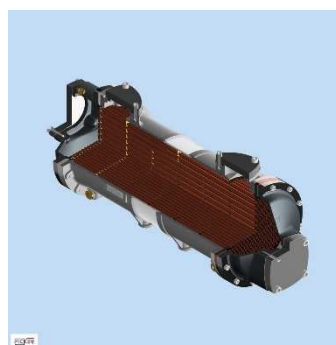
Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)		Exchange surface (m ²)
Baffles spacing			Bundle tubes material		
Narrow	Medium	Wide	Copper	Copper-nickel	
650	970	1000	920	1910	4.92 to 25.98

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	650	1910	180 to 537
Medium	970	1910	212 to 702
Wide	1000	1910	274 to 662

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D 1/2 cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D 1/2 cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

The PICKER heat exchangers are not subjected to the essential safety requirements of the « PRESSURE EQUIPEMENT DIRECTIVE » PED 2014/68/EU. They are manufactured in accordance with the « sound engineering practice » (Art. 4 §3 of this directive).

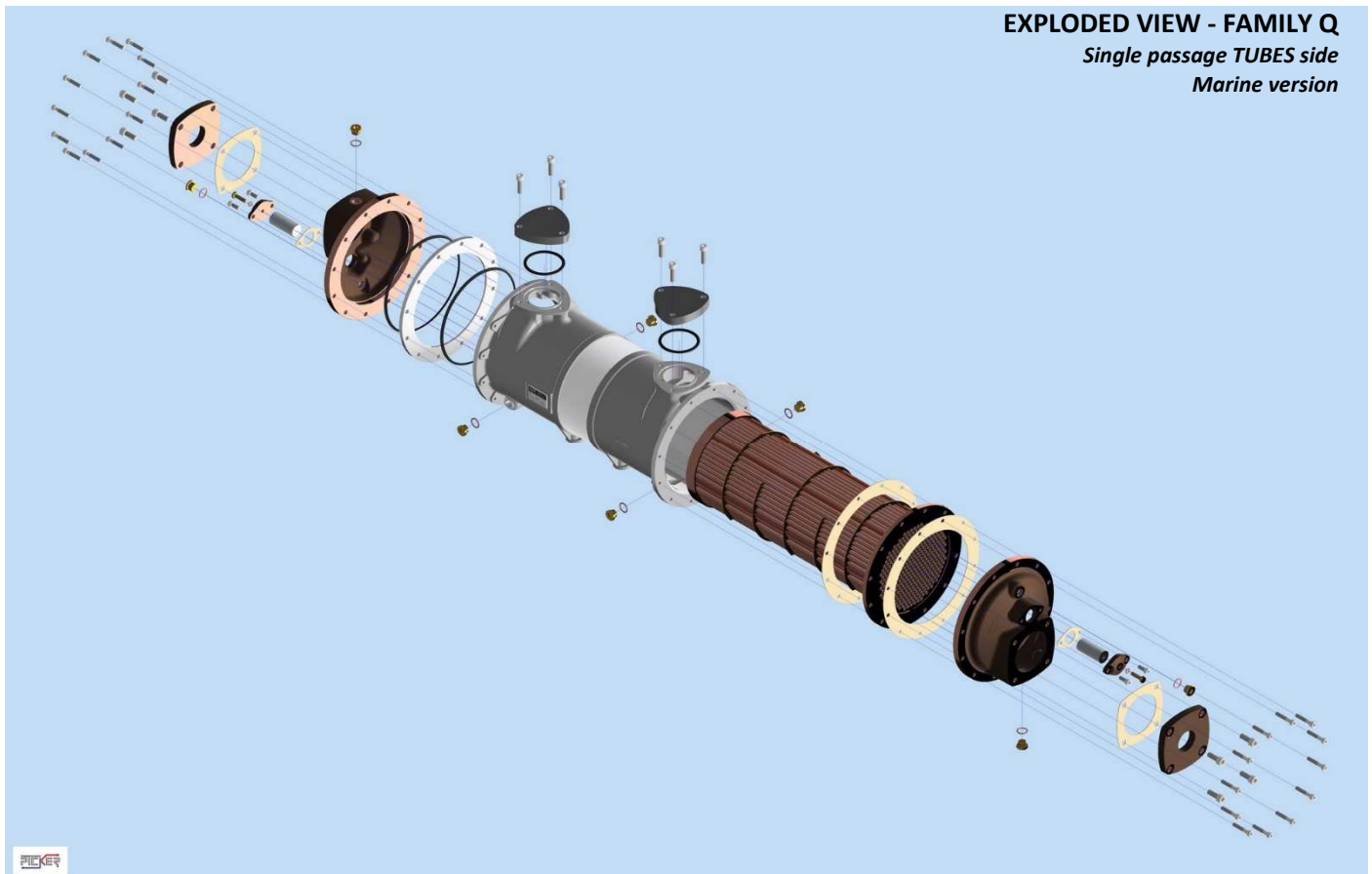
Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

MULTITUBULAR HEAT EXCHANGERS Family Q

For oil / water application
 For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 226.5 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
Q11	4.92	10.0	13.4	807
Q12	5.93	12.0	15.0	919
Q13	7.15	14.5	16.8	1053
Q14	8.61	17.5	19.1	1214
Q15	10.35	21.0	21.7	1406
Q16	12.46	25.3	24.9	1638
Q17	14.98	30.4	28.8	1916
Q18	18.00	36.5	33.4	2249
Q19	21.63	43.9	39.0	2649
Q20	25.98	52.7	45.7	3129
Shell tube diameter (mm) : 226.5				
Connections with counter-flanges SHELL side and TUBES side				



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

Family M

For oil / water application
For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 226.5 MM

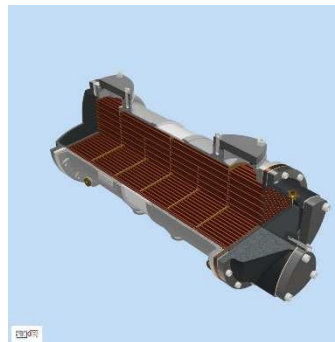
Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)		Exchange surface (m ²)
Baffles spacing			Bundle tubes material		
Narrow	Medium	Wide	Copper	Copper-nickel	
670	990	1000	450	1000	4.82 to 25.48

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	670	1000	184 to 521
Medium	990	1000	214 to 666
Wide	1000	1000	270 to 625

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

The PICKER heat exchangers are not subjected to the essential safety requirements of the « PRESSURE EQUIPEMENT DIRECTIVE » PED 2014/68/EU. They are manufactured in accordance with the « sound engineering practice » (Art. 4 §3 of this directive).

Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

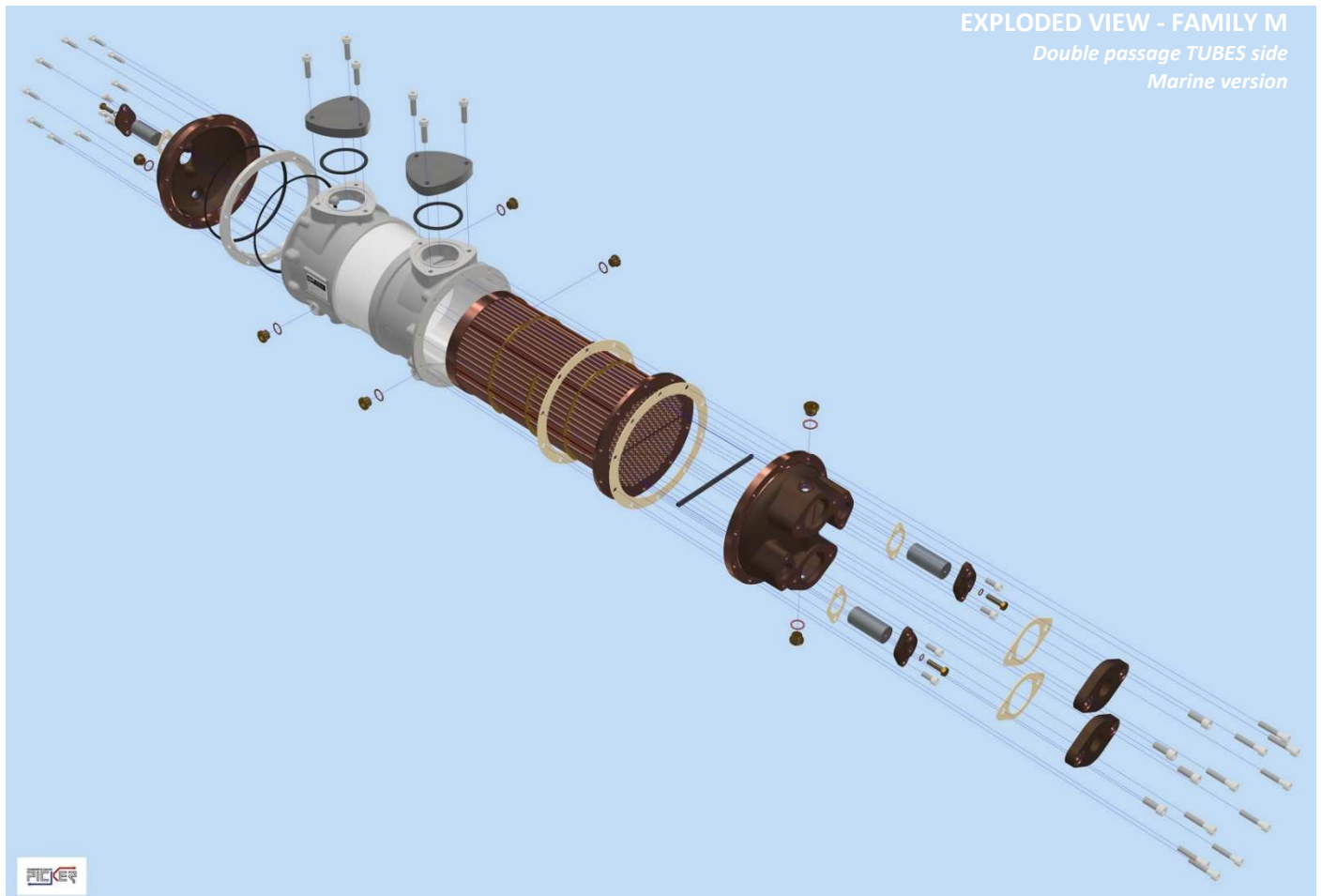
MULTITUBULAR HEAT EXCHANGERS

Family M

For oil / water application
 For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 226.5 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
M11	4.82	10.2	12.5	790
M12	5.82	12.3	14.0	902
M13	7.01	14.8	15.9	1036
M14	8.44	17.8	18.1	1197
M15	10.15	21.4	20.7	1389
M16	12.22	25.8	23.8	1621
M17	14.69	31.0	27.6	1899
M18	17.65	37.2	32.2	2232
M19	21.21	44.7	37.6	2632
M20	25.48	53.8	44.1	3112
Shell tube diameter (mm) : 226.5				
Connections with counter-flanges SHELL side and TUBES side				



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

MULTITUBULAR HEAT EXCHANGERS Family O

For oil / water application
For water / water application

Single passage TUBES side
SHELL TUBE DIAMETER 270 MM

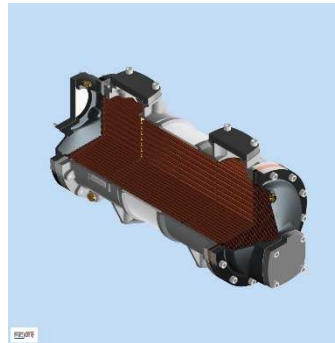
Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)		Exchange surface (m ²)
Baffles spacing			Bundle tubes material		
Narrow	Medium	Wide	Copper	Copper-nickel	
1070	1680	1910	1270	1910	6.75 to 43.09

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	1070	1910	240 to 864
Medium	1680	1910	402 to 1116
Wide	1910	1910	522 to 1101

For any other case or application, we recommend to consult PICKER S.A.



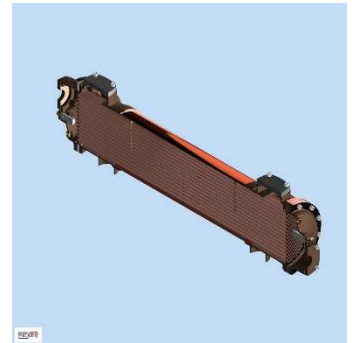
3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

The PICKER heat exchangers are not subjected to the essential safety requirements of the « PRESSURE EQUIPEMENT DIRECTIVE » PED 2014/68/EU. They are manufactured in accordance with the « sound engineering practice » (Art. 4 §3 of this directive).

Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

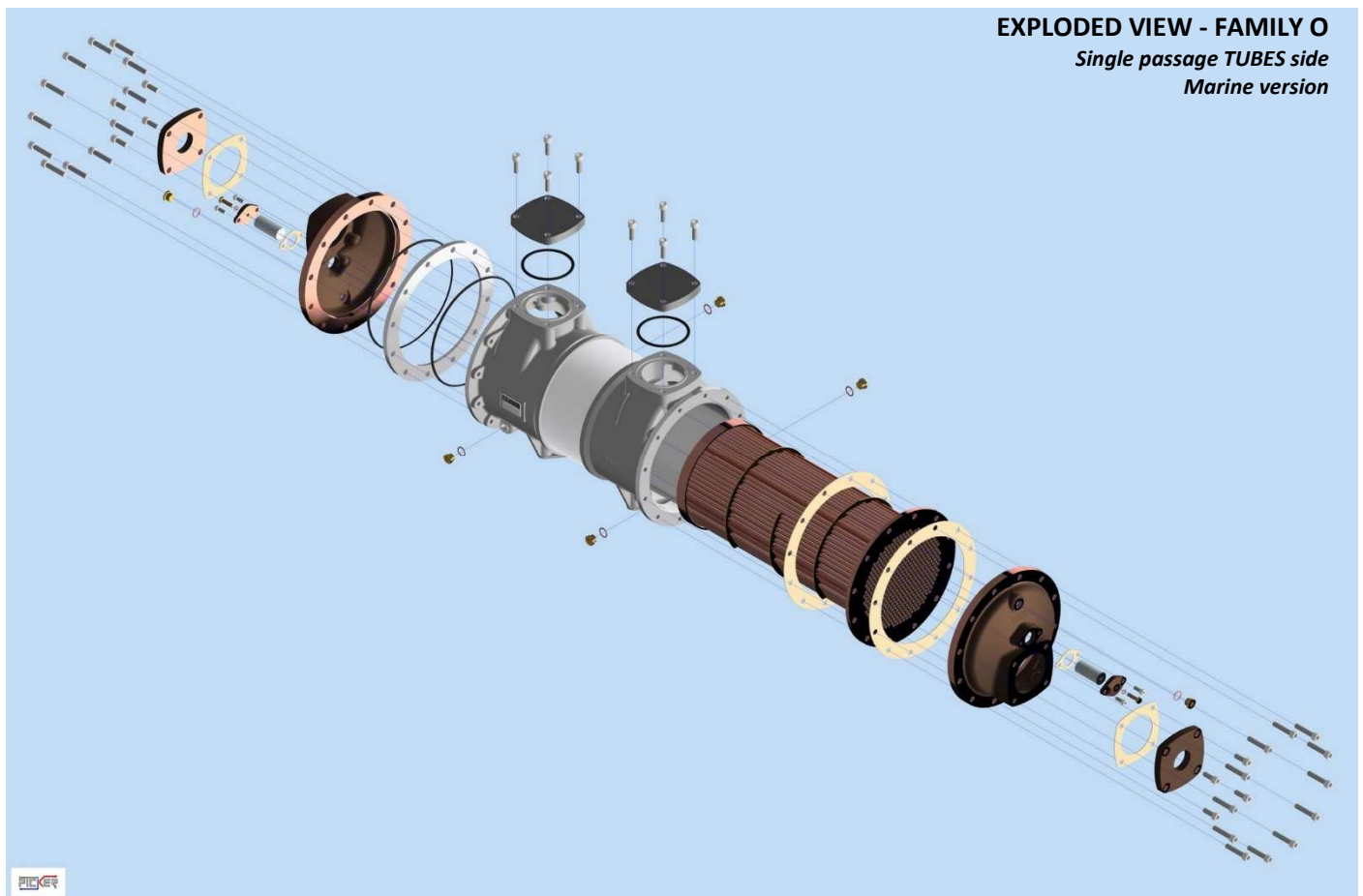
MULTITUBULAR HEAT EXCHANGERS

Family O

**For oil / water application
 For water / water application**

**Single passage TUBES side
 SHELL TUBE DIAMETER 270 MM**

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
O11	6.75	14.0	18.4	804
O12	8.15	16.9	20.5	916
O13	9.83	20.5	23.1	1050
O14	11.85	24.7	26.2	1211
O15	14.26	29.7	29.9	1403
O16	17.17	35.8	34.3	1635
O17	20.66	43.0	39.7	1913
O18	24.83	51.8	46.1	2246
O19	29.85	62.2	53.7	2646
O20	35.87	74.7	63.0	3126
O21	43.09	89.8	74.0	3702
Shell tube diameter (mm) : 270				
Connections with counter-flanges SHELL side and TUBES side				



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...

MULTITUBULAR HEAT EXCHANGERS Family R

For oil / water application
For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 270 MM

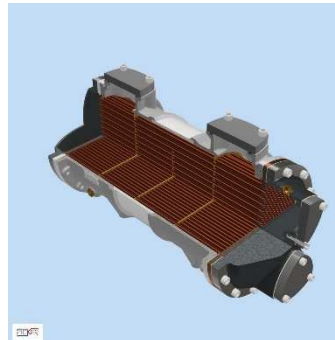
Max. admissible flow rate SHELL side (l/mn)			Max. admissible flow rate TUBES side (l/mn)		Exchange surface (m ²)
Baffles spacing			Bundle tubes material		
Narrow	Medium	Wide	Copper	Copper-nickel	
1140	1730	1910	620	1000	6.60 to 42.14

TYPICAL MAXIMUM PERFORMANCES (subject to permissible pressure drops)			
For hydraulic oil ISO VG 46 / water With oil inlet at 60 °C and water inlet at 20 °C			
Baffles spacing	Flow rate SHELL side (l/mn)	Flow rate TUBES side (l/mn)	Heat transferred (kW)
Narrow	1140	1000	251 to 825
Medium	1730	1000	404 to 1035
Wide	1910	1000	514 to 1021

For any other case or application, we recommend to consult PICKER S.A.



3D view
Oil / Fresh water



3D ½ cut view
Oil / Fresh water



3D view
Fresh water / Sea water



3D ½ cut view
Fresh water / Sea water

PRESSURES		
Maximum admissible pressure (bar)	SHELL side	TUBES side
Working	16	10
Testing	24	15

The PICKER heat exchangers are not subjected to the essential safety requirements of the « PRESSURE EQUIPEMENT DIRECTIVE » PED 2014/68/EU. They are manufactured in accordance with the « sound engineering practice » (Art. 4 §3 of this directive).

Application	Materials				
	Shell	Bundle tubes	Tubes-sheets	Baffles	Covers
Oil / Fresh water	Aluminium	Copper	Bronze	Brass	Cast-iron
Oil / Sea water	Aluminium	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)
Fresh water / Fresh water	Copper & bronze	Copper	Bronze	Brass	Cast-iron
Fresh water / Sea water	Copper & bronze	Copper-nickel	Bronze	Brass	Bronze (with zinc anodes)

MULTITUBULAR HEAT EXCHANGERS

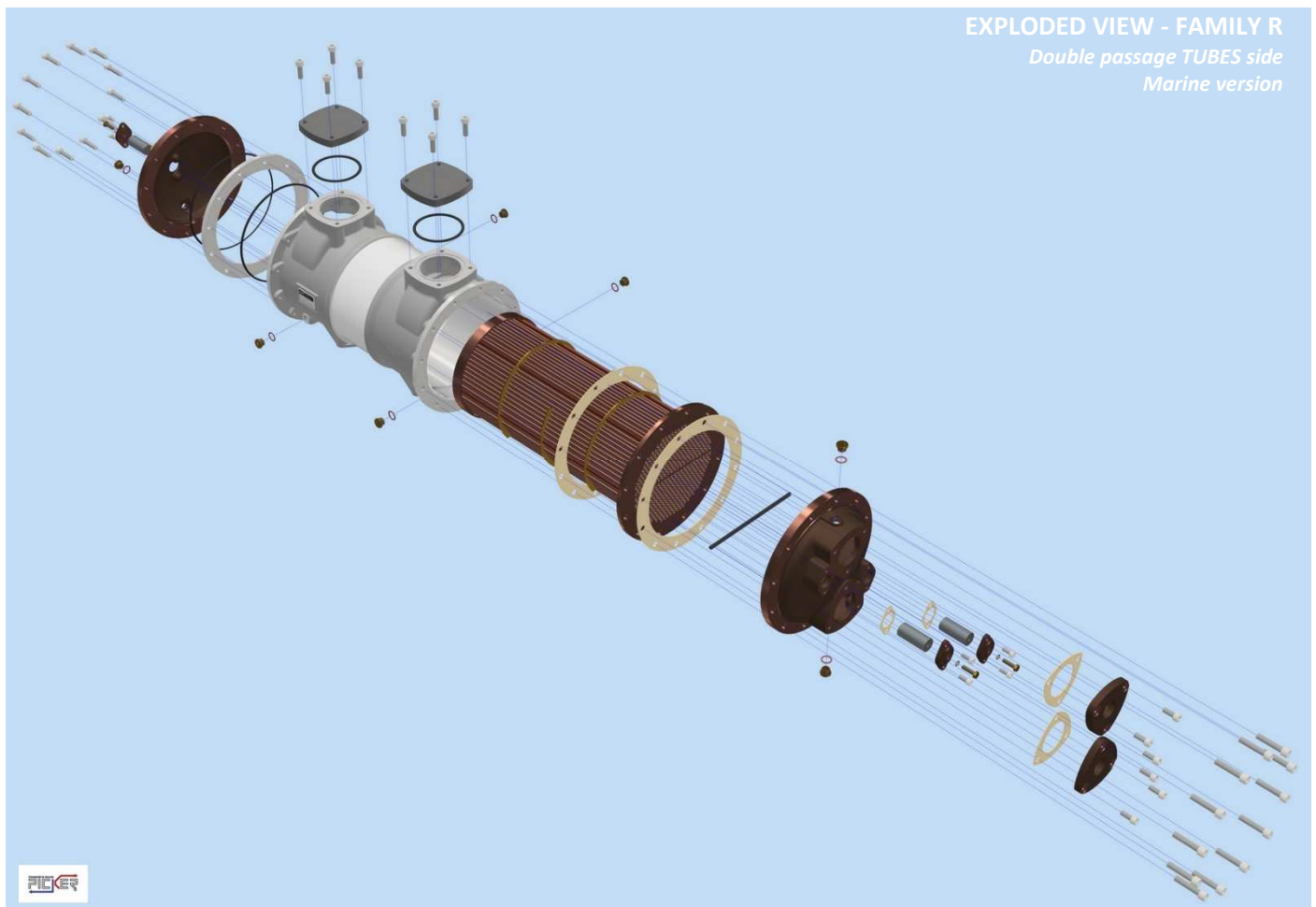
Family R

For oil / water application
 For water / water application

Double passage TUBES side
SHELL TUBE DIAMETER 270 MM

Type (length code)	Exchange surface (m ²)	Capacity (l)		Maximun overall length (mm)
		SHELL side	TUBES side	
R11	6.60	14.3	17.9	787
R12	7.97	17.3	20.0	899
R13	9.62	20.9	22.6	1033
R14	11.59	25.2	25.6	1194
R15	13.95	30.3	29.2	1386
R16	16.79	36.6	33.5	1618
R17	20.20	43.9	38.8	1896
R18	24.28	52.9	45.0	2229
R19	29.19	63.5	52.5	2629
R20	35.08	76.3	61.5	3109
R21	42.14	91.7	72.4	3685

Shell tube diameter (mm) : 270
 Connections with counter-flanges SHELL side and TUBES side



APPLICATIONS

Hydraulic package, hydraulic equipment, generator set, compressor, fire safety, thermal engine, centralized lubrication, hydraulic press, marine propulsion, vehicle propulsion, railway propulsion, pumping system, construction machinery, speed reducer, torque converter, gearbox, winch, transmission, car industry, aerospace industry, rolling mill, extrusion machinery, crusher, machine tool, special machinery, plastic injection moulding, heat recovery, hot water production, cutting fluid, broadcast transmitter, water treatment plant, temper fluid, petroleum industry, electric transformer ...