

## Heat Exchanger - Series KS

The KS Series has been specially developed as a standardised heat exchanger series for oil, air, gas and coolant cooling. Combinations of materials and components allow the heat exchangers to be adapted to a variety of operational conditions. The very compact form factor facilitates optimal integration of the heat exchangers in the design of a facility. The structural layout is put together individually for each application according to the technical parameters provided by the customer. For applications with problematic water quality, the heat exchangers can be equipped water-side with a burn-in coating incorporating enhanced corrosion and encrustation protection or with titanium pipe bundles.



### APPLICATIONS:

- Engines and gear boxes
- Piston and turbo compressors
- Screw compressors
- Hydraulic systems
- Refrigeration systems
- Fuel systems

### ADVANTAGES FOR THE KS SERIES:

- Compact design - light weight
- Low pressure loss - robust construction
- Very low sensitivity to vibration
- Double O-ring sealing - no mixing of media possible
- Removable tube bundles on both sides - low service and maintenance

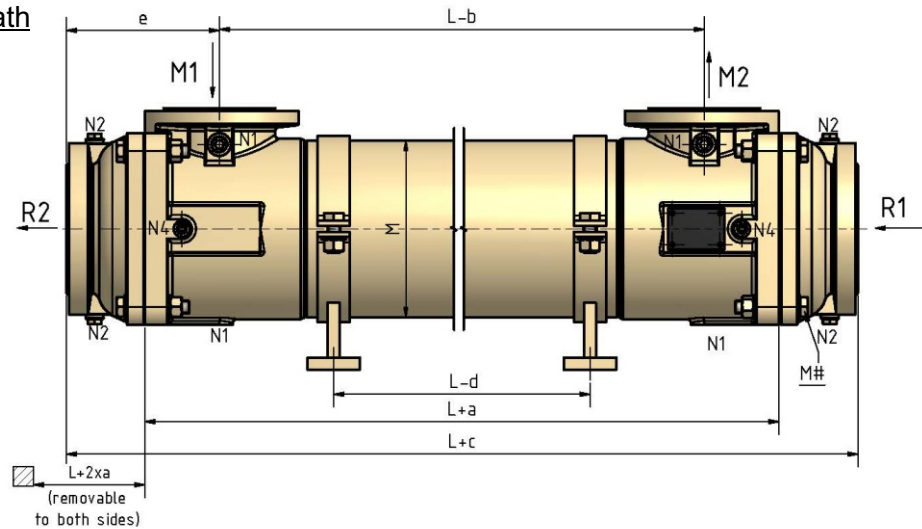
### TECHNICAL DETAILS:

- Shell diameters DN100, DN125, DN200, DN250, DN350
- Max. temperature / pressure shellside 130 °C - 16 bar / 120°C - 64 bar
- Material tubes: 1.4404, CuNi10Fe1Mn, Titanium
- Material shell: steel, stainless steel, aluminium
- Heat load depending on application up to 1,5 MW

# Heat Exchanger - Series KS

## KS SERIES - MAX PRESSURE 30 bar

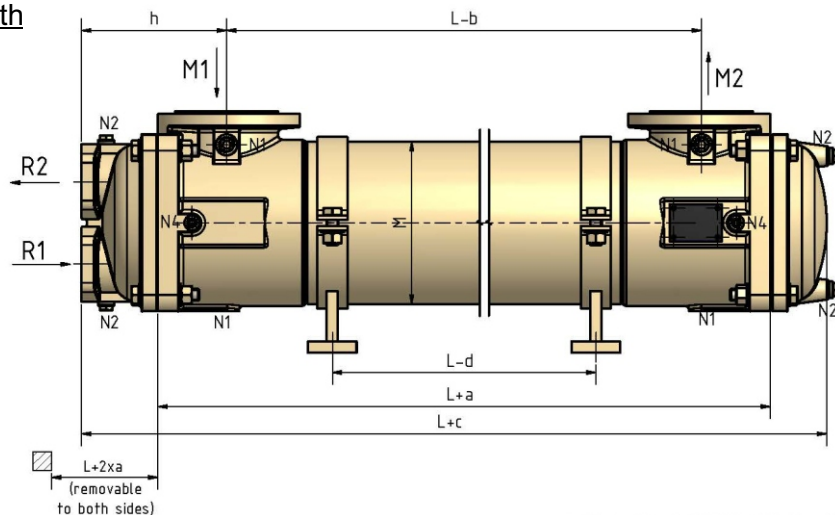
### Tubeside: 1 - path



Shell side: Shelltube-P235GH, endpiece - GP240GH									Tube side: A-EN-GJL-250, B - G-CuSn5PbZn, F-S235JRG/P265GH or 1.4301 *****A- Bonnet DN80 PN16 from AISi9Mg (3.1)	
Type	M	DN	Lmin	Lmax	a	b	c	e	DN# PN16 for A,B-bonnet	SAE # for F-bonnet
KS10	DN100	SAE 1 1/4"	300	1500	20	50,2	93,4	77,9	BSP 1 1/2"	-
KS12	DN125	DN50 PN40	400	3600	26	116,2	160,3	157,3	DN65****	SAE 2"
KS20	DN200	DN80 PN40	500	3600	32	152,2	226,2	209,3	DN100	SAE 3"
KS25	DN250	DN125 PN40	650	3600	39	205,2	274,8	246,8	DN125	SAE 4"

Other connections on the tube side possible upon request.

### Tubeside: 2 - path



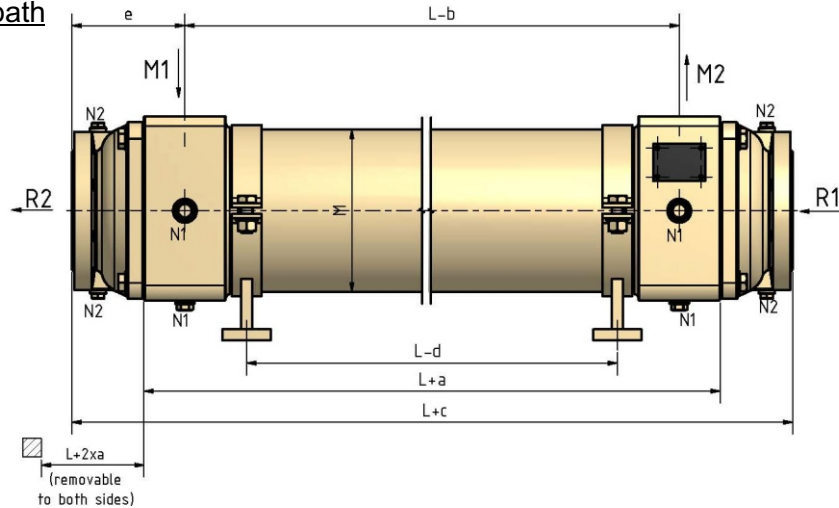
Shell side: Shelltube-P235GH, endpiece -GP240GH									Tube side: A-EN-GJL-250, B - G-CuSn5PbZn, F-S235JRG/P265GH or 1.4301 *****A- Bonnet DN80 PN16 from AISi9Mg (3.1)	
Type	M	DN	Lmin	Lmax	a	b	c	e	SAE #	BSP #
KS10	DN100	SAE 1 1/4"	300	1500	20	50,2	93,4	77,9	-	BSP 3/4"
KS12	DN125	DN50 PN40	400	3600	26	116,2	160,3	157,3	SAE 1 1/2"	BSP 1 1/4"
KS20	DN200	DN80 PN40	500	3600	32	152,2	226,2	209,3	SAE 2 1/2", DN50 PN16	BSP 2" -
KS25	DN250	DN125 PN40	650	3600	39	205,2	274,8	246,8	SAE 3"	BSP 2 1/2"

Other connections on the tube side possible upon request.

# Heat Exchanger - Series KW

## KW SERIES - MAX PRESSURE 40 bar

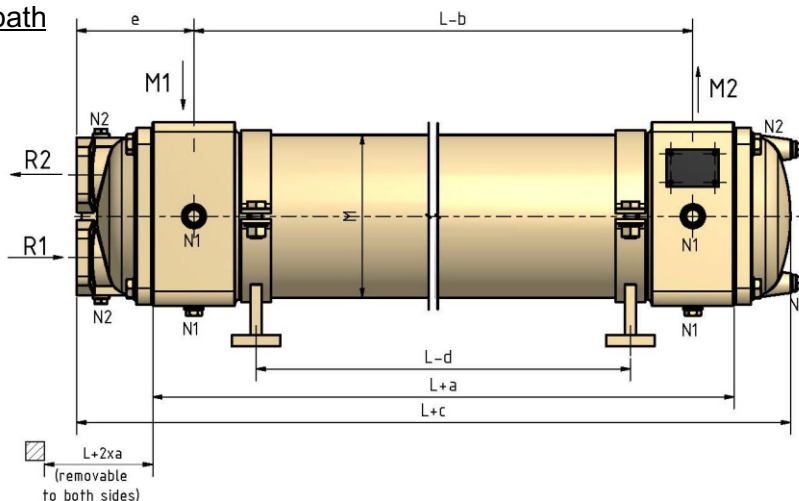
### Tubeside: 1 - path



Shell side: Shelltube-P235GH, endpiece - P265GH AD-W1 (3.1)									Tube side: A-EN-GJL-250, B - G-CuSn5PbZn, F-S235JRG/P265GH or 1.4301 *****A- Bonnet DN80 PN16 from AlSi9Mg (3.1)	
Type	M	SAE	Lmin	Lmax	a	b	c	e	DN# PN16 for A,B-bonnet	SAE # for F-bonnet
KW12	DN125	2"	400	3600	26	116,2	160,3	157,3	DN65****	SAE 2"
KW20	DN200	2 1/2"	500	3600	32	152,2	226,2	209,3	DN100	SAE 3"
KW25	DN250	3"	650	3600	39	205,2	274,8	246,8	DN125	SAE 4"

Other connections on the tube side possible upon request.  
The 2 path version possible (same connection KS-type).

### Tubeside: 2 - path

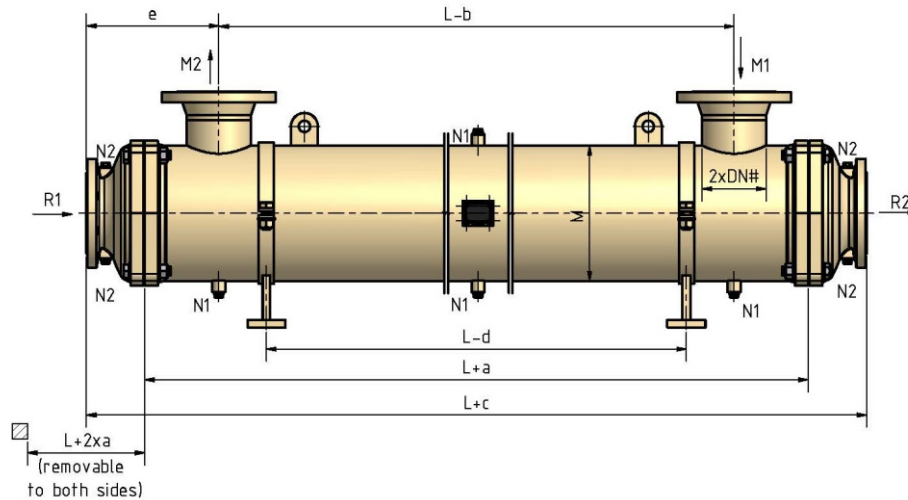


Shell side: Shelltube-P235GH, endpiece - P265GH AD-W1 (3.1)									Tube side: A-EN-GJL-250, B - G-CuSn5PbZn, F-S235JRG/P265GH or 1.4301 *****A- Bonnet DN80 PN16 from AlSi9Mg (3.1)	
Type	M	SAE	Lmin	Lmax	a	b	c	e	SAE #	BSP #
KW12	DN125	2"	400	3600	26	116,2	160,3	157,3	SAE 1 1/2"	BSP 1 1/4"
KW20	DN200	2 1/2"	500	3600	32	152,2	226,2	209,3	SAE 2 1/2", DN50 PN16	BSP 2" -
KW25	DN250	3"	650	3600	39	205,2	274,8	246,8	SAE 3"	BSP 2 1/2"

Other connections on the tube side possible upon request.

## Heat Exchanger - Series K

### K-SERIES - MAX PRESSURE 30 bar



Shell side: shelltube-P235GH or 1.4301, flange ring-GP240/GHP265GH/1.4301									Tube side: A-EN-GJL-250, B - G-CuSn5PbZn, F-S235JRG/P265GH or 1.4301 ****A- Bonnet DN80 PN16 from AlSi9Mg (3.1)		
Type	M	DN	Lmin	Lmax	a	b	c	e	DN# PN16 for A,B,F-bonnet	SAE# for F-bonnet	BSP #
K10	DN100	DN15-DN65	300	1500	20	50,2	93,4	77,9	-	-	G 1 1/2"
K12	DN125	DN15-DN100	400	3600	26	116,2	160,3	157,3	DN65****	SAE 2"	-
K20	DN200	DN15-DN150	500	3600	32	152,2	226,2	209,3	DN100	SAE 3"	-
K25	DN250	DN15-DN200	650	3600	39	205,2	274,8	246,8	DN125	SAE 4"	-
K35	DN350	DN15-DN250	650	3600	39	350	345,8	260,8	DN150	SAE 4"	-

Other connections on the tube side possible upon request.  
The 2 path version possible (same connection KS-type).

### K-SERIES - HIGH PRESSURE - MAX. 64 bar

Dimensions shellside: DN 200, DN 250, DN 350

Design temperature / pressure shellside: max. 120°C / 64 bar

### KS-SERIES - DOUBLE HEAT EXCHANGER

Where required we can also deliver the KS-Series as dual heat exchangers with various switching armatures so that the system remains functional during servicing and cleaning thereby enabling uninterrupted operation.

