

TUBULAR STEAM HEATER

DETAILED OVERVIEW FOR TYPE 'TSH'
MEDIUM PRESSURE - 40 BAR



Dimensions overview for type Ø129 & Ø209 - 40bar[g]

Tubular steam heaters are highly used in the food and beverage industry and in connection with many applications such as CIP units. In the food and beverage industry tubular heat exchangers are often used in systems to reduce or eliminate microbials to make products safe for consumption and to extend their shelf life. A tubular heat exchanger may also be used to heat or cool products prior to filling, drying, concentration or other processes.

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Contents

Introduction	3
Regulations and Directives	3
Documentation	3
Group specifications.....	4
Connections	5
Service side limits	5
TSH-01-129-40 (section 1 of 2).....	6
TSH-01-129-40 (section 2 of 2)	7
TSH-01-129-40-F	8
TSH-02-129-40 (section 1 of 2)	9
TSH-02-129-40 (section 2 of 2)	10
TSH-02-129-40-F	11
TSH-03-129-40 (section 1 of 2)	12
TSH-03-129-40 (section 2 of 2)	13
TSH-03-129-40-F	14
TSH-01-209-40.....	15
TSH-01-209-40-F.....	16
TSH-02-209-40	17
TSH-02-209-40-F	18
TSH-03-209-40	19
TSH-03-209-40-F	20
TSH-04-209-40	21
TSH-04-209-40-F	22
TSH-06-209-40	23
TSH-06-209-40-F	24
TSH-08-209-40	25
TSH-08-209-40-F.....	26

Introduction

This overview is for Tubular Steam Heaters manufactured by Wila A/S under the category "TSH" hereinafter referred to as "Heat Exchanger". A Tubular Heat Exchanger is by design, two Pressure chambers in a combined housing.

The inner chamber consists of both ends and the insides of all tubes in the tube bundle, hereinafter referred to as "Tube side" or "Product side".

The outer pressure chamber consists of the outside of the tube bundle, and the inside of the exchangers outer shell, hereinafter referred to as "Shell side" or "Service side".

The Heat Exchanger is intended for a steam to fluid heat transfer and is made from EN.1.4404 (AISI 316L) stainless steel with a sanitary surface finish. The tube side is suitable for food stuff fluids, such as dairy products and juices. The outside surface roughness is $\leq 1,6\mu\text{m}$ and the internal tube side surface roughness is $\leq 0,8\mu\text{m}$. **All fluid media in use with the Heat exchanger, must be compatible with EN.1.4404 (AISI 316L) Stainless Steel.**

The 40 BAR (580 PSI), maximum product side pressure, heat exchanger design is based on either a Ø129x2 shell or a Ø209x3mm shell. Other sizes and pressure ratings are also available.

Regulations and Directives

The heat exchanger is designed and manufactured in accordance with

- the European Commission regulation No. 2023/2006 (Good Manufacturing Practices)
- the European Parliament directive No. EN 1935/2004 (Food Contact Materials).
- the European Parliament directive No. EN 1907/2006 (Chemical Restrictions (REACH)).
- PED - Article 4.3 (SEP) in the European Parliament directive No. 2014/68/EU (Pressure Equipment Directive). The Heat Exchanger is only designed for fluid group 2 (non-dangerous fluids). For (dangerous fluids) group I restrictions may apply.

Documentation

1. Customer drawing with description and design data table
2. Declaration of conformity
3. Pressure test certificate
4. User Manual

As Supplement the following can be provided:

5. 3.1 material certificates according to EN 10204
6. Weld-logs with associated welding certificates according to DS/EN ISO 9601-1.

Group specifications

Group ordering codes and specifications are as listed below. A more detailed group tables with unit codes and main dimensions can be found on the following pages.

TSH-xx-xxx-40

TSH	Tubular Steam Heater	
xx	01, 02, 03, 04, 06, 08 *	Indicates the heat transfer surface area in m ² .
xxx	Either 129 or 209 *	Indicates the heat exchanger shell diameter in mm.
40	The heat exchanger is designed for pressure up to 40 bar.	

* Other versions are available.

TSH-xx-xxx-yyy-zz

xx	See above	
xxx	See above	
yyy	See below	Indicates tube side clamp ferrule connection.
zz	See below	Indicates shell side clamp ferrule connection.

Tube side (P1 and P2) connections are:

Shell size's	Tube side connection size's	
Ø129mm	DN125 – DN100 – DN80 – DN65	in accordance with DIN 32676-A
Ø129mm	Ø101.6 – Ø76.1 – Ø63.5	In accordance with ISO 2852-2
Ø209mm	DN150 – DN125 – DN100	in accordance with DIN 32676-A
Ø209mm	Ø101.6	in accordance with ISO 2852-2

Shell side (S1 and S2) connections, both Ø129 and Ø209 are:

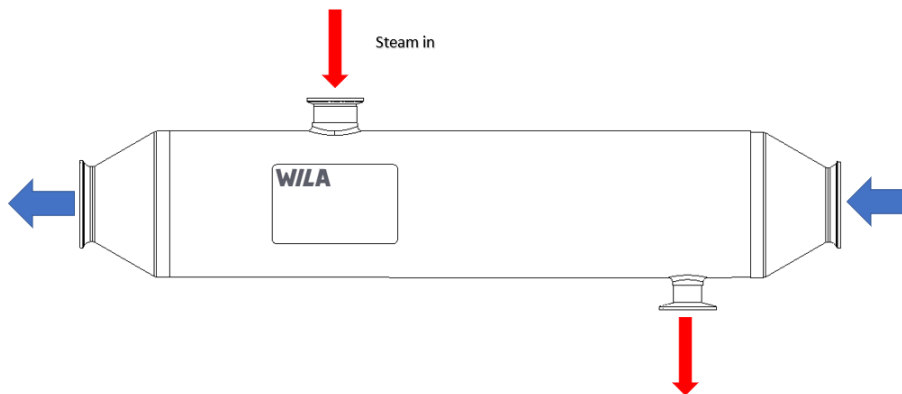
DN80 – DN65 – DN50 – DN40 – DN25	in accordance with DIN 32676-A
Ø76.1 – Ø63.5 – Ø51 – Ø38 – Ø25	in accordance with ISO 2852-2
DN80 (82) – DN65 (70) – DN50 (54) – DN40 (43) – DN25 (28) *	in accordance with DIN 2633 / EN 1092 Type 11

* Numbers in parentheses is numbers used in unit codes in following pages.

For both tube and shell sides other connections types and sizes are available.

Connections

Always follow your fitting supplier guidelines and local legislations. SSH clamping rings (or similar) are recommended. For steam connections the outlet should always be at the lowest point.



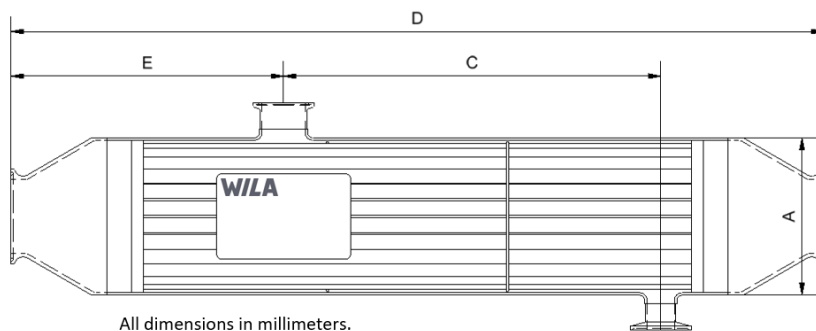
Service side limits

The heat exchanger's shell side maximum pressure and temperature limits are based on the maximum allowed steam pressure, which varies with the size of the heat exchanger:

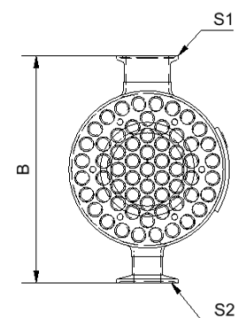
1. For heat exchanger size 1 m² these limits are respectively 10 bar[g] and 185°C
2. For heat exchanger size 2 m² these limits are respectively 8 bar[g] and 176°C
3. For heat exchanger size 3 m² these limits are respectively 6 bar[g] and 165°C
4. For heat exchanger size 4 m² these limits are respectively 4 bar[g] and 152°C
5. For heat exchanger size 6 m² these limits are respectively 3 bar[g] and 144°C
6. For heat exchanger size 8 m² these limits are respectively 2.3 bar[g] and 136°C

Note:

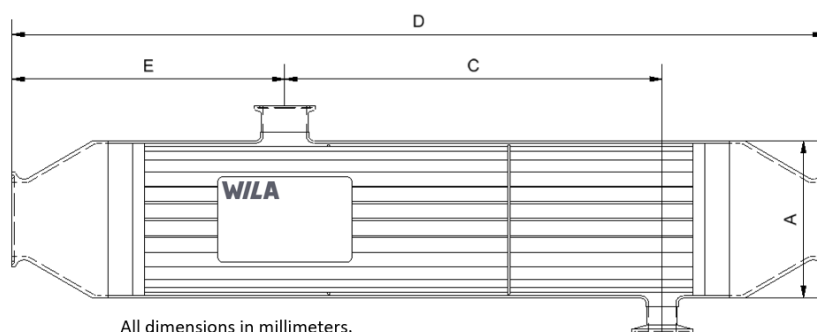
In the following group tables 'Tube bank' is data on the product tubes running paralell inside the shell.



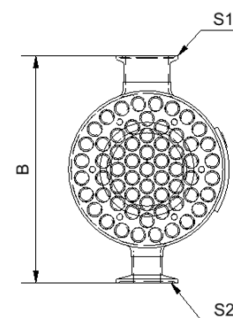
All dimensions in millimeters.



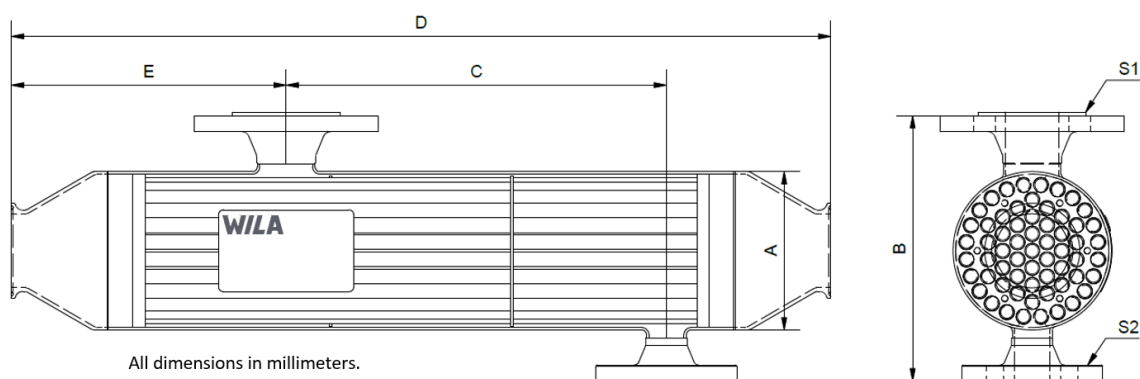
TSH-01-129-40 (section 1 of 2)		40 barg / 85°C		10 bar[g] / 185°C			Maximum pressure / temperature			
		Volume 4.5 liters		Volume 2.5 liters			316L Concentric		Dry weight 14 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-80	W-038785	DN125	Ø129	DN80	DN40	192	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-80	W-038786	DN100	Ø129	DN80	DN40	192	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-80	W-038787	Ø101.6	Ø129	DN80	DN40	192	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-80	W-038788	DN80	Ø129	DN80	DN40	192	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-80	W-038789	Ø76.1	Ø129	DN80	DN40	192	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-80	W-038790	DN65	Ø129	DN80	DN40	192	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-80	W-038791	Ø63.5	Ø129	DN80	DN40	192	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-76	W-038792	DN125	Ø129	Ø76.1	Ø38	186	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-76	W-038793	DN100	Ø129	Ø76.1	Ø38	186	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-76	W-038794	Ø101.6	Ø129	Ø76.1	Ø38	186	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-76	W-038795	DN80	Ø129	Ø76.1	Ø38	186	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-76	W-038796	Ø76.1	Ø129	Ø76.1	Ø38	186	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-76	W-038797	DN65	Ø129	Ø76.1	Ø38	186	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-76	W-038798	Ø63.5	Ø129	Ø76.1	Ø38	186	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-65	W-038799	DN125	Ø129	DN65	DN40	192	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-65	W-038800	DN100	Ø129	DN65	DN40	192	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-65	W-038801	Ø101.6	Ø129	DN65	DN40	192	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-65	W-038802	DN80	Ø129	DN65	DN40	192	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-65	W-038803	Ø76.1	Ø129	DN65	DN40	192	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-65	W-038804	DN65	Ø129	DN65	DN40	192	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-65	W-038805	Ø63.5	Ø129	DN65	DN40	192	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-63	W-038806	DN125	Ø129	Ø63.5	Ø38	186	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-63	W-038807	DN100	Ø129	Ø63.5	Ø38	186	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-63	W-038808	Ø101.6	Ø129	Ø63.5	Ø38	186	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-63	W-038809	DN80	Ø129	Ø63.5	Ø38	186	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-63	W-038810	Ø76.1	Ø129	Ø63.5	Ø38	186	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-63	W-038811	DN65	Ø129	Ø63.5	Ø38	186	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-63	W-038812	Ø63.5	Ø129	Ø63.5	Ø38	186	310	668	224	61 pc Ø12x1mm



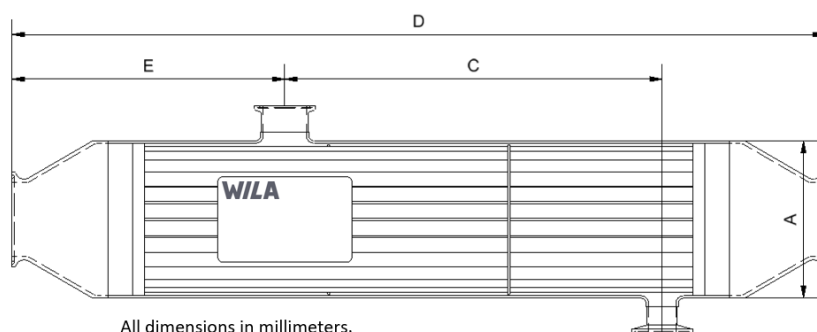
All dimensions in millimeters.



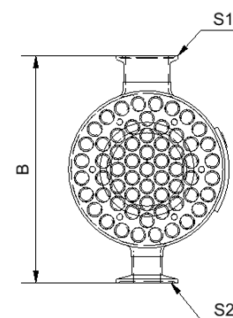
TSH-01-129-40 (section 2 of 2)		40 barg / 85°C		10 bar[g] / 185°C			Maximum pressure / temperature			
		Volume 4.5 liters		Volume 2.5 liters			316L Concentric		Dry weight 14 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-50	W-038813	DN125	Ø129	DN50	DN25	186	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-50	W-038814	DN100	Ø129	DN50	DN25	186	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-50	W-038815	Ø101.6	Ø129	DN50	DN25	186	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-50	W-038816	DN80	Ø129	DN50	DN25	186	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-50	W-038817	Ø76.1	Ø129	DN50	DN25	186	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-50	W-038818	DN65	Ø129	DN50	DN25	186	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-50	W-038819	Ø63.5	Ø129	DN50	DN25	186	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-51	W-038820	DN125	Ø129	Ø51	Ø25	186	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-51	W-038821	DN100	Ø129	Ø51	Ø25	186	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-51	W-038822	Ø101.6	Ø129	Ø51	Ø25	186	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-51	W-038823	DN80	Ø129	Ø51	Ø25	186	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-51	W-038824	Ø76.1	Ø129	Ø51	Ø25	186	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-51	W-038825	DN65	Ø129	Ø51	Ø25	186	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-51	W-038826	Ø63.5	Ø129	Ø51	Ø25	186	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-40	W-038827	DN125	Ø129	DN40	DN25	186	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-40	W-015585	DN100	Ø129	DN40	DN25	186	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-40	W-038829	Ø101.6	Ø129	DN40	DN25	186	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-40	W-015584	DN80	Ø129	DN40	DN25	186	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-40	W-038831	Ø76.1	Ø129	DN40	DN25	186	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-40	W-015583	DN65	Ø129	DN40	DN25	186	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-40	W-038833	Ø63.5	Ø129	DN40	DN25	186	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-38	W-038834	DN125	Ø129	Ø38	Ø25	186	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-38	W-038835	DN100	Ø129	Ø38	Ø25	186	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-38	W-015574	Ø101.6	Ø129	Ø38	Ø25	186	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-38	W-038837	DN80	Ø129	Ø38	Ø25	186	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-38	W-015573	Ø76.1	Ø129	Ø38	Ø25	186	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-38	W-038839	DN65	Ø129	Ø38	Ø25	186	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-38	W-015572	Ø63.5	Ø129	Ø38	Ø25	186	310	668	224	61 pc Ø12x1mm



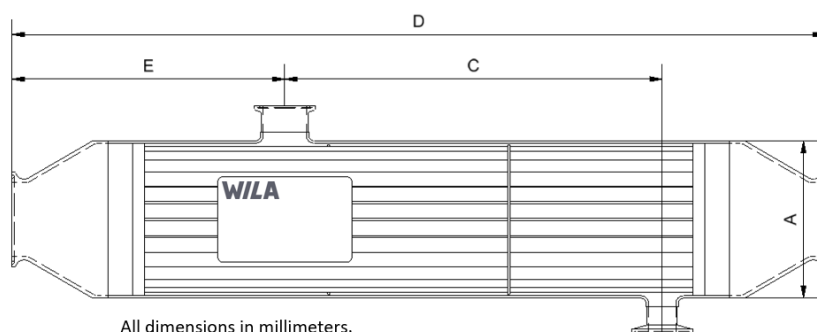
TSH-01-129-40-F		40 barg / 85°C		10 bar[g] / 185°C			Maximum pressure / temperature			
		Volume 4.5 liters		Volume 2.5 liters			316L Concentric		Dry weight 14 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-82F	W-038953	DN125	Ø129	DN80	DN40	229	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-82F	W-038954	DN100	Ø129	DN80	DN40	229	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-82F	W-038955	Ø101.6	Ø129	DN80	DN40	229	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-82F	W-038956	DN80	Ø129	DN80	DN40	229	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-82F	W-038957	Ø76.1	Ø129	DN80	DN40	229	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-82F	W-038958	DN65	Ø129	DN80	DN40	229	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-82F	W-038959	Ø63.5	Ø129	DN80	DN40	229	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-70F	W-038960	DN125	Ø129	DN65	DN40	224	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-70F	W-038961	DN100	Ø129	DN65	DN40	224	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-70F	W-038962	Ø101.6	Ø129	DN65	DN40	224	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-70F	W-038963	DN80	Ø129	DN65	DN40	224	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-70F	W-038964	Ø76.1	Ø129	DN65	DN40	224	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-70F	W-038965	DN65	Ø129	DN65	DN40	224	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-70F	W-038966	Ø63.5	Ø129	DN65	DN40	224	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-54F	W-038967	DN125	Ø129	DN50	DN25	221	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-54F	W-038968	DN100	Ø129	DN50	DN25	221	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-54F	W-038969	Ø101.6	Ø129	DN50	DN25	221	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-54F	W-038970	DN80	Ø129	DN50	DN25	221	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-54F	W-038971	Ø76.1	Ø129	DN50	DN25	221	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-54F	W-038972	DN65	Ø129	DN50	DN25	221	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-54F	W-038973	Ø63.5	Ø129	DN50	DN25	221	310	668	224	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-129-125-43F	W-038974	DN125	Ø129	DN40	DN25	218	310	566	173	61 pc Ø12x1mm
TSH-01-129-100-43F	W-038975	DN100	Ø129	DN40	DN25	218	310	604	192	61 pc Ø12x1mm
TSH-01-129-101-43F	W-038976	Ø101.6	Ø129	DN40	DN25	218	310	600	190	61 pc Ø12x1mm
TSH-01-129-080-43F	W-038977	DN80	Ø129	DN40	DN25	218	310	622	201	61 pc Ø12x1mm
TSH-01-129-076-43F	W-038978	Ø76.1	Ø129	DN40	DN25	218	310	646	213	61 pc Ø12x1mm
TSH-01-129-065-43F	W-038979	DN65	Ø129	DN40	DN25	218	310	650	215	61 pc Ø12x1mm
TSH-01-129-063-43F	W-038980	Ø63.5	Ø129	DN40	DN25	218	310	668	224	61 pc Ø12x1mm



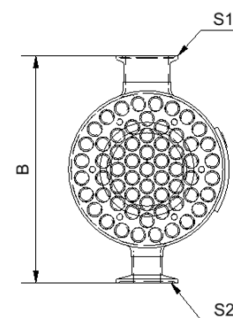
All dimensions in millimeters.



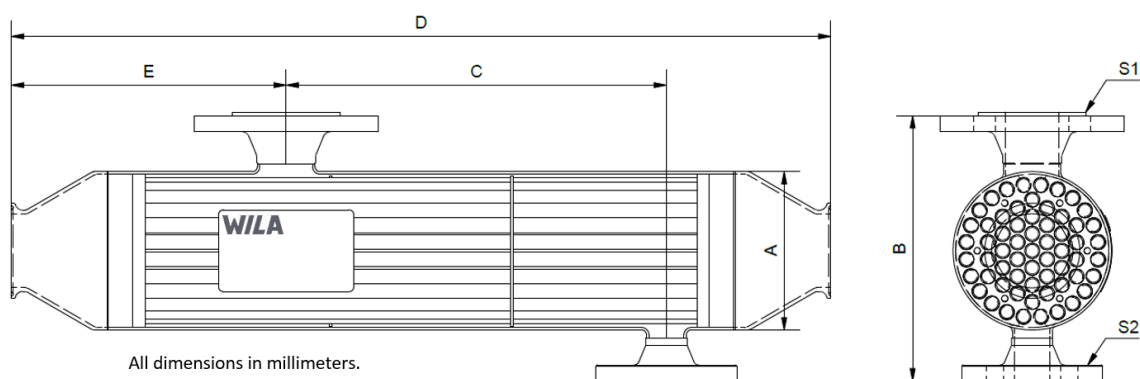
TSH-02-129-40 (section 1 of 2)		40 barg / 85°C		8 bar[g] / 176°C			Maximum pressure / temperature			
		Volume 6.5 liters		Volume 5 liters			316L Concentric		Dry weight 26 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-80	W-038841	DN125	Ø129	DN80	DN40	192	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-80	W-038842	DN100	Ø129	DN80	DN40	192	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-80	W-038843	Ø101.6	Ø129	DN80	DN40	192	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-80	W-038844	DN80	Ø129	DN80	DN40	192	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-80	W-038845	Ø76.1	Ø129	DN80	DN40	192	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-80	W-038846	DN65	Ø129	DN80	DN40	192	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-80	W-038847	Ø63.5	Ø129	DN80	DN40	192	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-76	W-038848	DN125	Ø129	Ø76.1	Ø38	186	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-76	W-038849	DN100	Ø129	Ø76.1	Ø38	186	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-76	W-038850	Ø101.6	Ø129	Ø76.1	Ø38	186	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-76	W-038851	DN80	Ø129	Ø76.1	Ø38	186	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-76	W-038852	Ø76.1	Ø129	Ø76.1	Ø38	186	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-76	W-038853	DN65	Ø129	Ø76.1	Ø38	186	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-76	W-038854	Ø63.5	Ø129	Ø76.1	Ø38	186	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-65	W-038855	DN125	Ø129	DN65	DN40	192	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-65	W-038856	DN100	Ø129	DN65	DN40	192	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-65	W-038857	Ø101.6	Ø129	DN65	DN40	192	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-65	W-031590	DN80	Ø129	DN65	DN40	192	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-65	W-038859	Ø76.1	Ø129	DN65	DN40	192	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-65	W-038860	DN65	Ø129	DN65	DN40	192	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-65	W-038861	Ø63.5	Ø129	DN65	DN40	192	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-63	W-038862	DN125	Ø129	Ø63.5	Ø38	186	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-63	W-038863	DN100	Ø129	Ø63.5	Ø38	186	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-63	W-038864	Ø101.6	Ø129	Ø63.5	Ø38	186	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-63	W-038865	DN80	Ø129	Ø63.5	Ø38	186	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-63	W-038866	Ø76.1	Ø129	Ø63.5	Ø38	186	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-63	W-038867	DN65	Ø129	Ø63.5	Ø38	186	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-63	W-038868	Ø63.5	Ø129	Ø63.5	Ø38	186	655	1148	359	61 pc Ø12x1mm



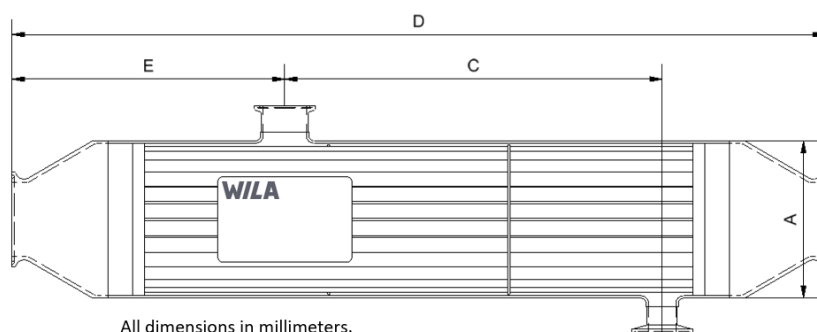
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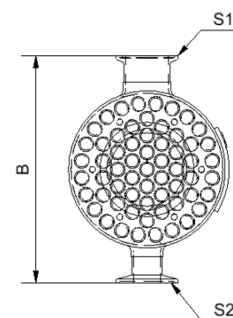
TSH-02-129-40 (section 2 of 2)		40 barg / 85°C		8 bar[g] / 176°C			Maximum pressure / temperature			
		Volume 6.5 liters		Volume 5 liters			316L Concentric		Dry weight 26 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-50	W-015588	DN125	Ø129	DN50	DN25	186	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-50	W-015587	DN100	Ø129	DN50	DN25	186	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-50	W-038871	Ø101.6	Ø129	DN50	DN25	186	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-50	W-015586	DN80	Ø129	DN50	DN25	186	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-50	W-038873	Ø76.1	Ø129	DN50	DN25	186	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-50	W-033754	DN65	Ø129	DN50	DN25	186	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-50	W-038875	Ø63.5	Ø129	DN50	DN25	186	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-51	W-015578	DN125	Ø129	Ø51	Ø25	186	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-51	W-038877	DN100	Ø129	Ø51	Ø25	186	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-51	W-015577	Ø101.6	Ø129	Ø51	Ø25	186	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-51	W-038879	DN80	Ø129	Ø51	Ø25	186	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-51	W-015576	Ø76.1	Ø129	Ø51	Ø25	186	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-51	W-038881	DN65	Ø129	Ø51	Ø25	186	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-51	W-015575	Ø63.5	Ø129	Ø51	Ø25	186	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-40	W-038883	DN125	Ø129	DN40	DN25	186	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-40	W-038884	DN100	Ø129	DN40	DN25	186	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-40	W-038885	Ø101.6	Ø129	DN40	DN25	186	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-40	W-038886	DN80	Ø129	DN40	DN25	186	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-40	W-038887	Ø76.1	Ø129	DN40	DN25	186	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-40	W-033849	DN65	Ø129	DN40	DN25	186	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-40	W-038889	Ø63.5	Ø129	DN40	DN25	186	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-38	W-038890	DN125	Ø129	Ø38	Ø25	186	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-38	W-038891	DN100	Ø129	Ø38	Ø25	186	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-38	W-038892	Ø101.6	Ø129	Ø38	Ø25	186	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-38	W-038893	DN80	Ø129	Ø38	Ø25	186	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-38	W-038894	Ø76.1	Ø129	Ø38	Ø25	186	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-38	W-038895	DN65	Ø129	Ø38	Ø25	186	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-38	W-038767	Ø63.5	Ø129	Ø38	Ø25	186	655	1148	359	61 pc Ø12x1mm



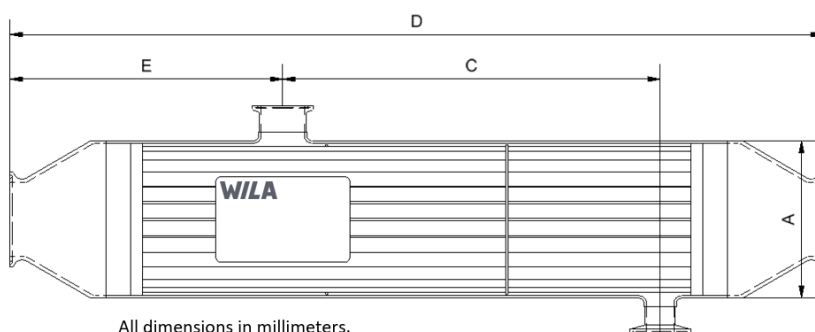
TSH-02-129-40-F		40 barg / 85°C		8 bar[g] / 176°C			Maximum pressure / temperature			
		Volume 6.5 liters		Volume 5 liters			316L Concentric		Dry weight 26 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-82F	W-038981	DN125	Ø129	DN80	DN40	229	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-82F	W-038982	DN100	Ø129	DN80	DN40	229	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-82F	W-038983	Ø101.6	Ø129	DN80	DN40	229	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-82F	W-038984	DN80	Ø129	DN80	DN40	229	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-82F	W-038985	Ø76.1	Ø129	DN80	DN40	229	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-82F	W-038986	DN65	Ø129	DN80	DN40	229	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-82F	W-038987	Ø63.5	Ø129	DN80	DN40	229	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-70F	W-038988	DN125	Ø129	DN65	DN40	224	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-70F	W-038989	DN100	Ø129	DN65	DN40	224	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-70F	W-038990	Ø101.6	Ø129	DN65	DN40	224	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-70F	W-038991	DN80	Ø129	DN65	DN40	224	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-70F	W-038992	Ø76.1	Ø129	DN65	DN40	224	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-70F	W-038993	DN65	Ø129	DN65	DN40	224	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-70F	W-038994	Ø63.5	Ø129	DN65	DN40	224	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-54F	W-038995	DN125	Ø129	DN50	DN25	221	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-54F	W-038996	DN100	Ø129	DN50	DN25	221	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-54F	W-038997	Ø101.6	Ø129	DN50	DN25	221	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-54F	W-038998	DN80	Ø129	DN50	DN25	221	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-54F	W-038999	Ø76.1	Ø129	DN50	DN25	221	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-54F	W-039000	DN65	Ø129	DN50	DN25	221	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-54F	W-039001	Ø63.5	Ø129	DN50	DN25	221	655	1148	359	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-129-125-43F	W-039002	DN125	Ø129	DN40	DN25	218	655	1046	308	61 pc Ø12x1mm
TSH-02-129-100-43F	W-039003	DN100	Ø129	DN40	DN25	218	655	1084	327	61 pc Ø12x1mm
TSH-02-129-101-43F	W-039004	Ø101.6	Ø129	DN40	DN25	218	655	1080	325	61 pc Ø12x1mm
TSH-02-129-080-43F	W-039005	DN80	Ø129	DN40	DN25	218	655	1102	336	61 pc Ø12x1mm
TSH-02-129-076-43F	W-039006	Ø76.1	Ø129	DN40	DN25	218	655	1126	348	61 pc Ø12x1mm
TSH-02-129-065-43F	W-039007	DN65	Ø129	DN40	DN25	218	655	1130	350	61 pc Ø12x1mm
TSH-02-129-063-43F	W-039008	Ø63.5	Ø129	DN40	DN25	218	655	1148	359	61 pc Ø12x1mm



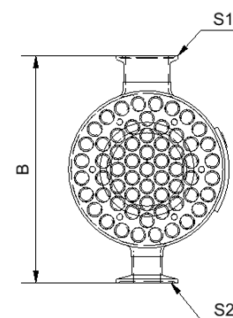
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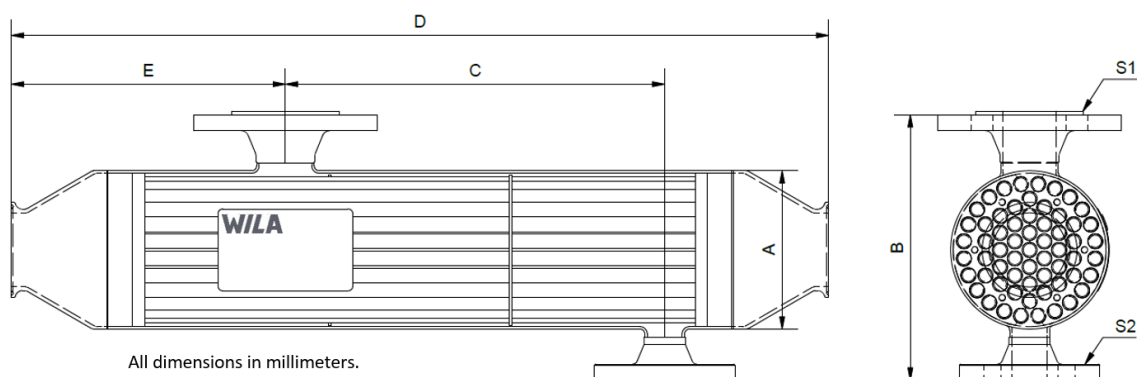
TSH-03-129-40 (section 1 of 2)		40 barg / 85°C		6 bar[g] / 165°C			Maximum pressure / temperature			
		Volume 9 liters		Volume 7.5 liters			316L Concentric		Dry weight 37 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-80	W-038897	DN125	Ø129	DN80	DN40	192	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-80	W-038898	DN100	Ø129	DN80	DN40	192	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-80	W-038899	Ø101.6	Ø129	DN80	DN40	192	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-80	W-038900	DN80	Ø129	DN80	DN40	192	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-80	W-038901	Ø76.1	Ø129	DN80	DN40	192	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-80	W-038902	DN65	Ø129	DN80	DN40	192	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-80	W-038903	Ø63.5	Ø129	DN80	DN40	192	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-76	W-038904	DN125	Ø129	Ø76.1	Ø38	186	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-76	W-038905	DN100	Ø129	Ø76.1	Ø38	186	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-76	W-038906	Ø101.6	Ø129	Ø76.1	Ø38	186	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-76	W-038907	DN80	Ø129	Ø76.1	Ø38	186	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-76	W-038908	Ø76.1	Ø129	Ø76.1	Ø38	186	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-76	W-038909	DN65	Ø129	Ø76.1	Ø38	186	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-76	W-038910	Ø63.5	Ø129	Ø76.1	Ø38	186	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-65	W-015591	DN125	Ø129	DN65	DN40	192	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-65	W-015590	DN100	Ø129	DN65	DN40	192	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-65	W-038913	Ø101.6	Ø129	DN65	DN40	192	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-65	W-015589	DN80	Ø129	DN65	DN40	192	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-65	W-038915	Ø76.1	Ø129	DN65	DN40	192	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-65	W-038916	DN65	Ø129	DN65	DN40	192	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-65	W-038917	Ø63.5	Ø129	DN65	DN40	192	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-63	W-015581	DN125	Ø129	Ø63.5	Ø38	186	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-63	W-038919	DN100	Ø129	Ø63.5	Ø38	186	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-63	W-015580	Ø101.6	Ø129	Ø63.5	Ø38	186	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-63	W-038921	DN80	Ø129	Ø63.5	Ø38	186	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-63	W-015579	Ø76.1	Ø129	Ø63.5	Ø38	186	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-63	W-038923	DN65	Ø129	Ø63.5	Ø38	186	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-63	W-038924	Ø63.5	Ø129	Ø63.5	Ø38	186	1020	1648	489	61 pc Ø12x1mm



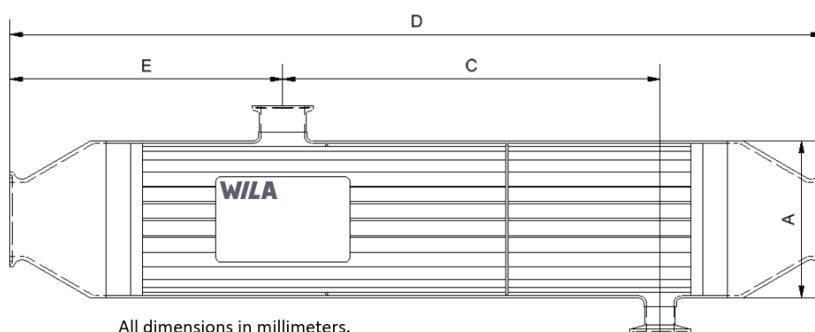
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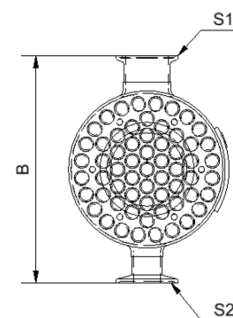
TSH-03-129-40 (section 2 of 2)		40 barg / 85°C		6 bar[g] / 165°C			Maximum pressure / temperature			
		Volume 9 liters		Volume 7.5 liters			316L Concentric		Dry weight 37 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-50	W-038925	DN125	Ø129	DN50	DN25	186	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-50	W-032412	DN100	Ø129	DN50	DN25	186	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-50	W-038927	Ø101.6	Ø129	DN50	DN25	186	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-50	W-038928	DN80	Ø129	DN50	DN25	186	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-50	W-038929	Ø76.1	Ø129	DN50	DN25	186	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-50	W-038930	DN65	Ø129	DN50	DN25	186	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-50	W-038931	Ø63.5	Ø129	DN50	DN25	186	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-51	W-038932	DN125	Ø129	Ø51	Ø25	186	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-51	W-038933	DN100	Ø129	Ø51	Ø25	186	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-51	W-038934	Ø101.6	Ø129	Ø51	Ø25	186	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-51	W-038935	DN80	Ø129	Ø51	Ø25	186	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-51	W-038936	Ø76.1	Ø129	Ø51	Ø25	186	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-51	W-038937	DN65	Ø129	Ø51	Ø25	186	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-51	W-038938	Ø63.5	Ø129	Ø51	Ø25	186	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-40	W-038939	DN125	Ø129	DN40	DN25	186	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-40	W-038940	DN100	Ø129	DN40	DN25	186	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-40	W-038941	Ø101.6	Ø129	DN40	DN25	186	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-40	W-038942	DN80	Ø129	DN40	DN25	186	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-40	W-038943	Ø76.1	Ø129	DN40	DN25	186	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-40	W-038944	DN65	Ø129	DN40	DN25	186	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-40	W-038945	Ø63.5	Ø129	DN40	DN25	186	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-38	W-038946	DN125	Ø129	Ø38	Ø25	186	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-38	W-038947	DN100	Ø129	Ø38	Ø25	186	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-38	W-038948	Ø101.6	Ø129	Ø38	Ø25	186	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-38	W-038949	DN80	Ø129	Ø38	Ø25	186	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-38	W-038950	Ø76.1	Ø129	Ø38	Ø25	186	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-38	W-038951	DN65	Ø129	Ø38	Ø25	186	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-38	W-038952	Ø63.5	Ø129	Ø38	Ø25	186	1020	1648	489	61 pc Ø12x1mm



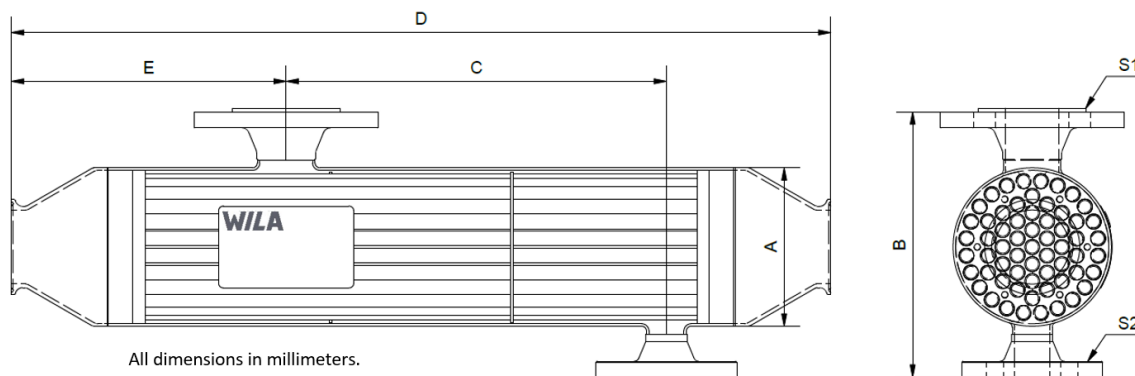
TSH-03-129-40-F		40 barg / 85°C		6 bar[g] / 165°C			Maximum pressure / temperature			
		Volume 9 liters		Volume 7.5 liters			316L Concentric		Dry weight 37 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-82F	W-039009	DN125	Ø129	DN80	DN40	229	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-82F	W-039010	DN100	Ø129	DN80	DN40	229	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-82F	W-039011	Ø101.6	Ø129	DN80	DN40	229	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-82F	W-039012	DN80	Ø129	DN80	DN40	229	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-82F	W-039013	Ø76.1	Ø129	DN80	DN40	229	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-82F	W-039014	DN65	Ø129	DN80	DN40	229	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-82F	W-039015	Ø63.5	Ø129	DN80	DN40	229	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-70F	W-039016	DN125	Ø129	DN65	DN40	224	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-70F	W-039017	DN100	Ø129	DN65	DN40	224	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-70F	W-039018	Ø101.6	Ø129	DN65	DN40	224	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-70F	W-039019	DN80	Ø129	DN65	DN40	224	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-70F	W-039020	Ø76.1	Ø129	DN65	DN40	224	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-70F	W-039021	DN65	Ø129	DN65	DN40	224	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-70F	W-039022	Ø63.5	Ø129	DN65	DN40	224	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-54F	W-039023	DN125	Ø129	DN50	DN25	221	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-54F	W-039024	DN100	Ø129	DN50	DN25	221	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-54F	W-039025	Ø101.6	Ø129	DN50	DN25	221	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-54F	W-039026	DN80	Ø129	DN50	DN25	221	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-54F	W-039027	Ø76.1	Ø129	DN50	DN25	221	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-54F	W-039028	DN65	Ø129	DN50	DN25	221	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-54F	W-039029	Ø63.5	Ø129	DN50	DN25	221	1020	1648	489	61 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-129-125-43F	W-039030	DN125	Ø129	DN40	DN25	218	1020	1546	438	61 pc Ø12x1mm
TSH-03-129-100-43F	W-039031	DN100	Ø129	DN40	DN25	218	1020	1584	457	61 pc Ø12x1mm
TSH-03-129-101-43F	W-039032	Ø101.6	Ø129	DN40	DN25	218	1020	1580	455	61 pc Ø12x1mm
TSH-03-129-080-43F	W-039033	DN80	Ø129	DN40	DN25	218	1020	1602	466	61 pc Ø12x1mm
TSH-03-129-076-43F	W-039034	Ø76.1	Ø129	DN40	DN25	218	1020	1626	478	61 pc Ø12x1mm
TSH-03-129-065-43F	W-039035	DN65	Ø129	DN40	DN25	218	1020	1630	480	61 pc Ø12x1mm
TSH-03-129-063-43F	W-039036	Ø63.5	Ø129	DN40	DN25	218	1020	1648	489	61 pc Ø12x1mm



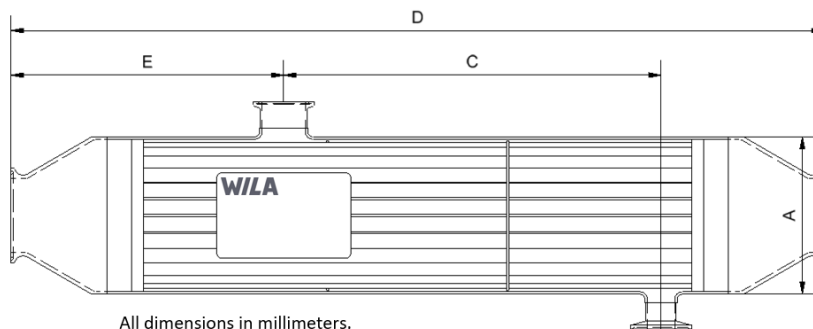
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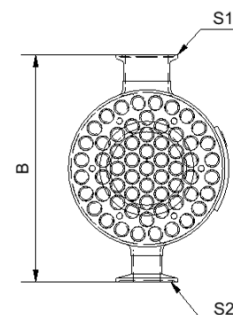
TSH-01-209-40		40 barg / 85°C		10 bar[g] / 185°C			Maximum pressure / temperature			
		Volume 8.5 liters		Volume 2.5 liters			316L Concentric		Dry weight 19 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-209-150-50	W-039037	DN150	Ø209	DN50	DN25	266	90	383	159	163 pc Ø12x1mm
TSH-01-209-125-50	W-039038	DN125	Ø209	DN50	DN25	266	90	427	181	163 pc Ø12x1mm
TSH-01-209-100-50	W-039039	DN100	Ø209	DN50	DN25	266	90	467	201	163 pc Ø12x1mm
TSH-01-209-101-50	W-039040	Ø101.6	Ø209	DN50	DN25	266	90	467	201	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-209-150-51	W-039041	DN150	Ø209	Ø51	Ø25	266	90	383	159	163 pc Ø12x1mm
TSH-01-209-125-51	W-039042	DN125	Ø209	Ø51	Ø25	266	90	427	181	163 pc Ø12x1mm
TSH-01-209-100-51	W-039043	DN100	Ø209	Ø51	Ø25	266	90	467	201	163 pc Ø12x1mm
TSH-01-209-101-51	W-039044	Ø101.6	Ø209	Ø51	Ø25	266	90	467	201	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-209-150-40	W-039045	DN150	Ø209	DN40	DN25	266	90	383	159	163 pc Ø12x1mm
TSH-01-209-125-40	W-039046	DN125	Ø209	DN40	DN25	266	90	427	181	163 pc Ø12x1mm
TSH-01-209-100-40	W-039047	DN100	Ø209	DN40	DN25	266	90	467	201	163 pc Ø12x1mm
TSH-01-209-101-40	W-039048	Ø101.6	Ø209	DN40	DN25	266	90	467	201	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-209-150-38	W-039049	DN150	Ø209	Ø38	Ø25	266	90	383	159	163 pc Ø12x1mm
TSH-01-209-125-38	W-039050	DN125	Ø209	Ø38	Ø25	266	90	427	181	163 pc Ø12x1mm
TSH-01-209-100-38	W-039051	DN100	Ø209	Ø38	Ø25	266	90	467	201	163 pc Ø12x1mm
TSH-01-209-101-38	W-039052	Ø101.6	Ø209	Ø38	Ø25	266	90	467	201	163 pc Ø12x1mm



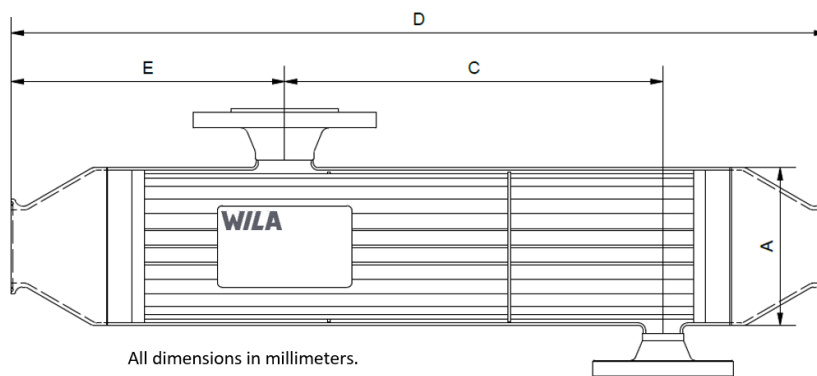
TSH-01-209-40-F		40 barg / 85°C		10 bar[g] / 185°C			Maximum pressure / temperature			
		Volume 8.5 liters		Volume 2.5 liters			316L Concentric		Dry weight 19 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-209-150-54F	W-039213	DN150	Ø209	DN50	DN25	301	90	383	159	163 pc Ø12x1mm
TSH-01-209-125-54F	W-039214	DN125	Ø209	DN50	DN25	301	90	427	181	163 pc Ø12x1mm
TSH-01-209-100-54F	W-039215	DN100	Ø209	DN50	DN25	301	90	467	201	163 pc Ø12x1mm
TSH-01-209-101-54F	W-039216	Ø101.6	Ø209	DN50	DN25	301	90	467	201	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-01-209-150-43F	W-039217	DN150	Ø209	DN40	DN25	298	90	383	159	163 pc Ø12x1mm
TSH-01-209-125-43F	W-039218	DN125	Ø209	DN40	DN25	298	90	427	181	163 pc Ø12x1mm
TSH-01-209-100-43F	W-039219	DN100	Ø209	DN40	DN25	298	90	467	201	163 pc Ø12x1mm
TSH-01-209-101-43F	W-039220	Ø101.6	Ø209	DN40	DN25	298	90	467	201	163 pc Ø12x1mm



All dimensions in millimeters.

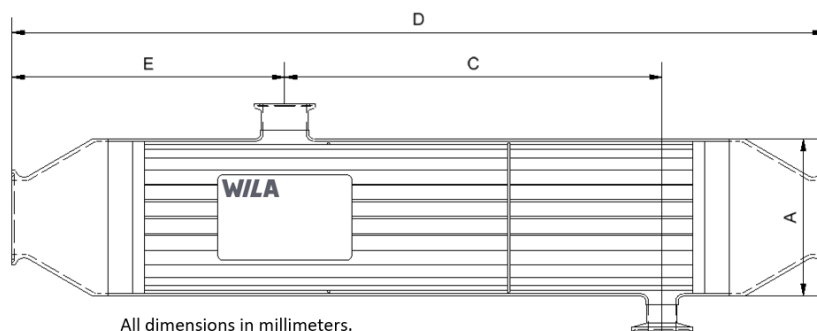


TSH-02-209-40		40 barg / 85°C	8 bar[g] / 176°C		Maximum pressure / temperature					
		Volume 11 liters	Volume 5.5 liters		316L Concentric			Dry weight 31 kg		
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-80	W-039053	DN150	Ø209	DN80	DN40	272	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-80	W-039054	DN125	Ø209	DN80	DN40	272	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-80	W-039055	DN100	Ø209	DN80	DN40	272	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-80	W-039056	Ø101.6	Ø209	DN80	DN40	272	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-76	W-039057	DN150	Ø209	Ø76.1	Ø38	266	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-76	W-039058	DN125	Ø209	Ø76.1	Ø38	266	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-76	W-039059	DN100	Ø209	Ø76.1	Ø38	266	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-76	W-039060	Ø101.6	Ø209	Ø76.1	Ø38	266	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-65	W-039061	DN150	Ø209	DN65	DN40	272	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-65	W-039062	DN125	Ø209	DN65	DN40	272	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-65	W-039063	DN100	Ø209	DN65	DN40	272	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-65	W-039064	Ø101.6	Ø209	DN65	DN40	272	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-63	W-039065	DN150	Ø209	Ø63.5	Ø38	266	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-63	W-039066	DN125	Ø209	Ø63.5	Ø38	266	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-63	W-039067	DN100	Ø209	Ø63.5	Ø38	266	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-63	W-039068	Ø101.6	Ø209	Ø63.5	Ø38	266	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-50	W-039069	DN150	Ø209	DN50	DN25	266	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-50	W-015616	DN125	Ø209	DN50	DN25	266	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-50	W-015615	DN100	Ø209	DN50	DN25	266	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-50	W-039072	Ø101.6	Ø209	DN50	DN25	266	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-51	W-039073	DN150	Ø209	Ø51	Ø25	266	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-51	W-015611	DN125	Ø209	Ø51	Ø25	266	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-51	W-039075	DN100	Ø209	Ø51	Ø25	266	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-51	W-015610	Ø101.6	Ø209	Ø51	Ø25	266	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-40	W-039077	DN150	Ø209	DN40	DN25	266	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-40	W-039078	DN125	Ø209	DN40	DN25	266	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-40	W-039079	DN100	Ø209	DN40	DN25	266	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-40	W-039080	Ø101.6	Ø209	DN40	DN25	266	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-38	W-039081	DN150	Ø209	Ø38	Ø25	266	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-38	W-039082	DN125	Ø209	Ø38	Ø25	266	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-38	W-039083	DN100	Ø209	Ø38	Ø25	266	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-38	W-039084	Ø101.6	Ø209	Ø38	Ø25	266	255	652	221	163 pc Ø12x1mm

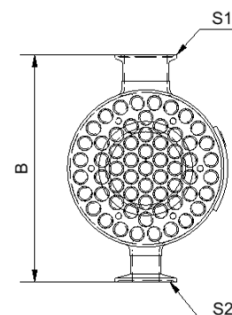


All dimensions in millimeters.

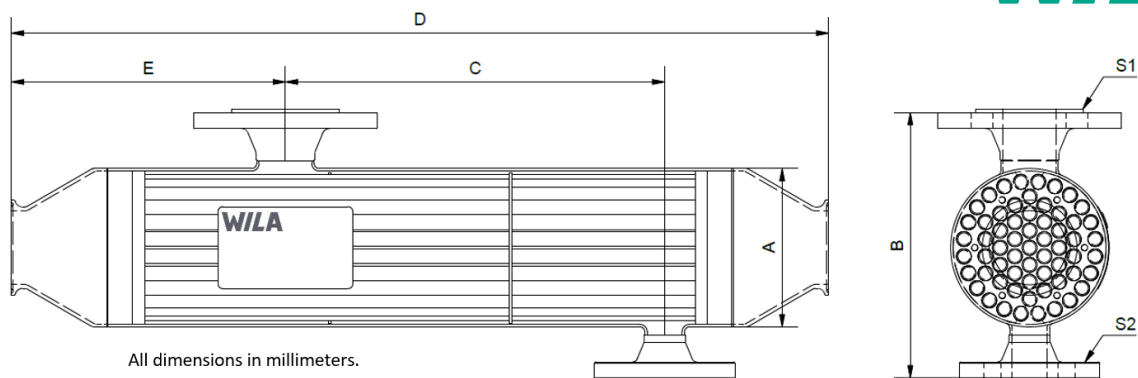
TSH-02-209-40-F		40 barg / 85°C		8 bar[g] / 176°C			Maximum pressure / temperature			
		Volume 11 liters		Volume 5.5 liters			316L Concentric		Dry weight 31 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-82F	W-039221	DN150	Ø209	DN80	DN40	309	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-82F	W-039222	DN125	Ø209	DN80	DN40	309	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-82F	W-039223	DN100	Ø209	DN80	DN40	309	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-82F	W-039224	Ø101.6	Ø209	DN80	DN40	306	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-70F	W-039225	DN150	Ø209	DN65	DN40	304	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-70F	W-039226	DN125	Ø209	DN65	DN40	304	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-70F	W-039227	DN100	Ø209	DN65	DN40	304	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-70F	W-039228	Ø101.6	Ø209	DN65	DN40	304	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-54F	W-039229	DN150	Ø209	DN50	DN25	301	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-54F	W-039230	DN125	Ø209	DN50	DN25	301	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-54F	W-039231	DN100	Ø209	DN50	DN25	301	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-54F	W-039232	Ø101.6	Ø209	DN50	DN25	301	255	652	221	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-02-209-150-43F	W-039233	DN150	Ø209	DN40	DN25	298	255	568	179	163 pc Ø12x1mm
TSH-02-209-125-43F	W-039234	DN125	Ø209	DN40	DN25	298	255	612	201	163 pc Ø12x1mm
TSH-02-209-100-43F	W-039235	DN100	Ø209	DN40	DN25	298	255	652	221	163 pc Ø12x1mm
TSH-02-209-101-43F	W-039236	Ø101.6	Ø209	DN40	DN25	298	255	652	221	163 pc Ø12x1mm



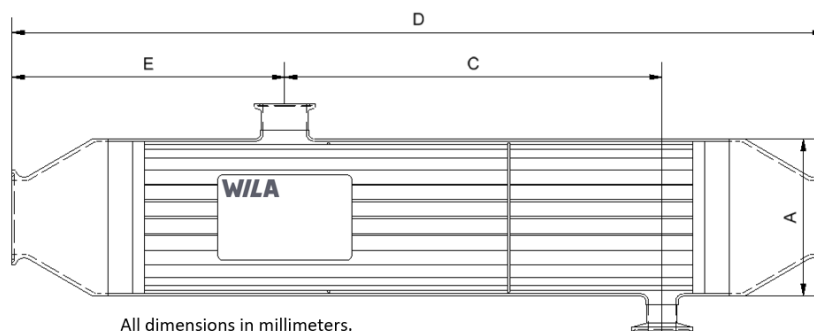
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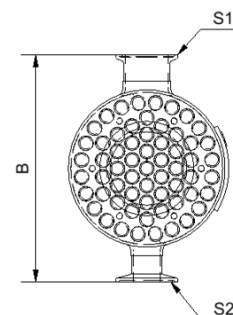
TSH-03-209-40		40 barg / 85°C		6 bar[g] / 165°C			Maximum pressure / temperature			
		Volume 14 liters		Volume 8.3 liters			316L Concentric		Dry weight 44 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-80	W-039085	DN150	Ø209	DN80	DN40	272	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-80	W-039086	DN125	Ø209	DN80	DN40	272	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-80	W-039087	DN100	Ø209	DN80	DN40	272	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-80	W-039088	Ø101.6	Ø209	DN80	DN40	272	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-76	W-039089	DN150	Ø209	Ø76.1	Ø38	266	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-76	W-039090	DN125	Ø209	Ø76.1	Ø38	266	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-76	W-039091	DN100	Ø209	Ø76.1	Ø38	266	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-76	W-039092	Ø101.6	Ø209	Ø76.1	Ø38	266	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-65	W-039093	DN150	Ø209	DN65	DN40	272	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-65	W-039094	DN125	Ø209	DN65	DN40	272	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-65	W-039095	DN100	Ø209	DN65	DN40	272	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-65	W-039096	Ø101.6	Ø209	DN65	DN40	272	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-63	W-039097	DN150	Ø209	Ø63.5	Ø38	266	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-63	W-039098	DN125	Ø209	Ø63.5	Ø38	266	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-63	W-039099	DN100	Ø209	Ø63.5	Ø38	266	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-63	W-039100	Ø101.6	Ø209	Ø63.5	Ø38	266	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-50	W-039101	DN150	Ø209	DN50	DN25	266	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-50	W-039102	DN125	Ø209	DN50	DN25	266	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-50	W-039103	DN100	Ø209	DN50	DN25	266	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-50	W-039104	Ø101.6	Ø209	DN50	DN25	266	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-51	W-039105	DN150	Ø209	Ø51	Ø25	266	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-51	W-039106	DN125	Ø209	Ø51	Ø25	266	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-51	W-039107	DN100	Ø209	Ø51	Ø25	266	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-51	W-039108	Ø101.6	Ø209	Ø51	Ø25	266	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-40	W-039109	DN150	Ø209	DN40	DN25	266	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-40	W-039110	DN125	Ø209	DN40	DN25	266	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-40	W-039111	DN100	Ø209	DN40	DN25	266	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-40	W-039112	Ø101.6	Ø209	DN40	DN25	266	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-38	W-039113	DN150	Ø209	Ø38	Ø25	266	405	877	249	163 pc Ø12x1mm
TSH-03-209-125-38	W-039114	DN125	Ø209	Ø38	Ø25	266	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-38	W-039115	DN100	Ø209	Ø38	Ø25	266	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-38	W-039116	Ø101.6	Ø209	Ø38	Ø25	266	405	872	291	163 pc Ø12x1mm



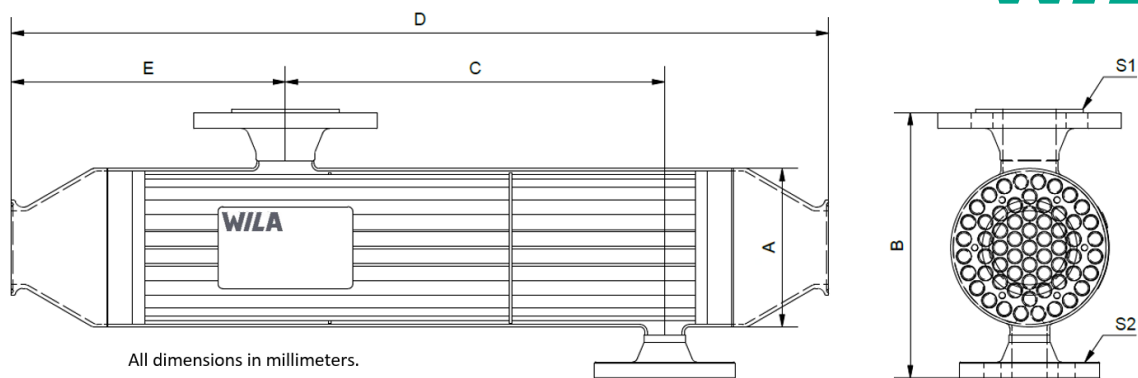
TSH-03-209-40-F		40 barg / 85°C		6 bar[g] / 165°C			Maximum pressure / temperature			
		Volume 14 liters		Volume 8.3 liters			316L Concentric		Dry weight 44 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-82F	W-039237	DN150	Ø209	DN80	DN40	309	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-82F	W-039238	DN125	Ø209	DN80	DN40	309	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-82F	W-039239	DN100	Ø209	DN80	DN40	309	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-82F	W-039240	Ø101.6	Ø209	DN80	DN40	306	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-70F	W-039241	DN150	Ø209	DN65	DN40	304	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-70F	W-039242	DN125	Ø209	DN65	DN40	304	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-70F	W-039243	DN100	Ø209	DN65	DN40	304	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-70F	W-039244	Ø101.6	Ø209	DN65	DN40	304	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-54F	W-039245	DN150	Ø209	DN50	DN25	301	405	788	249	163 pc Ø12x1mm
TSH-03-209-125-54F	W-039246	DN125	Ø209	DN50	DN25	301	405	832	271	163 pc Ø12x1mm
TSH-03-209-100-54F	W-039247	DN100	Ø209	DN50	DN25	301	405	872	291	163 pc Ø12x1mm
TSH-03-209-101-54F	W-039248	Ø101.6	Ø209	DN50	DN25	301	405	872	291	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-03-209-150-43F	W-039249	DN150	Ø209	DN40	DN25	298	255	788	249	163 pc Ø12x1mm
TSH-03-209-125-43F	W-039250	DN125	Ø209	DN40	DN25	298	255	832	271	163 pc Ø12x1mm
TSH-03-209-100-43F	W-039251	DN100	Ø209	DN40	DN25	298	255	872	291	163 pc Ø12x1mm
TSH-03-209-101-43F	W-039252	Ø101.6	Ø209	DN40	DN25	298	255	872	291	163 pc Ø12x1mm



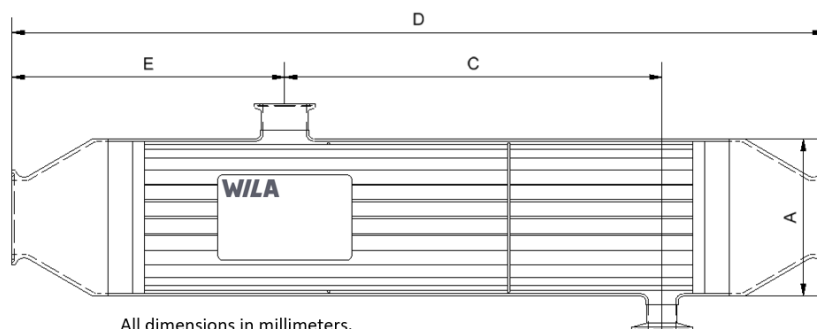
All dimensions in millimeters.



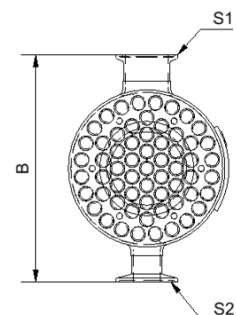
TSH-04-209-40		40 barg / 85°C		4 bar[g] / 152°C		Maximum pressure / temperature				
		Volume 15.5 liters		Volume 10.5 liters		316L Concentric		Dry weight 53 kg		
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-80	W-015619	DN150	Ø209	DN80	DN40	272	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-80	W-015618	DN125	Ø209	DN80	DN40	272	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-80	W-015617	DN100	Ø209	DN80	DN40	272	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-80	W-039120	Ø101.6	Ø209	DN80	DN40	272	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-76	W-015614	DN150	Ø209	Ø76.1	Ø38	266	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-76	W-015613	DN125	Ø209	Ø76.1	Ø38	266	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-76	W-039123	DN100	Ø209	Ø76.1	Ø38	266	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-76	W-015612	Ø101.6	Ø209	Ø76.1	Ø38	266	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-65	W-039125	DN150	Ø209	DN65	DN40	272	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-65	W-039126	DN125	Ø209	DN65	DN40	272	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-65	W-039127	DN100	Ø209	DN65	DN40	272	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-65	W-039128	Ø101.6	Ø209	DN65	DN40	272	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-63	W-039129	DN150	Ø209	Ø63.5	Ø38	266	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-63	W-039130	DN125	Ø209	Ø63.5	Ø38	266	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-63	W-039131	DN100	Ø209	Ø63.5	Ø38	266	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-63	W-039132	Ø101.6	Ø209	Ø63.5	Ø38	266	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-50	W-039133	DN150	Ø209	DN50	DN25	266	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-50	W-039134	DN125	Ø209	DN50	DN25	266	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-50	W-039135	DN100	Ø209	DN50	DN25	266	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-50	W-039136	Ø101.6	Ø209	DN50	DN25	266	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-51	W-039137	DN150	Ø209	Ø51	Ø25	266	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-51	W-039138	DN125	Ø209	Ø51	Ø25	266	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-51	W-039139	DN100	Ø209	Ø51	Ø25	266	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-51	W-039140	Ø101.6	Ø209	Ø51	Ø25	266	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-40	W-039141	DN150	Ø209	DN40	DN25	266	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-40	W-039142	DN125	Ø209	DN40	DN25	266	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-40	W-039143	DN100	Ø209	DN40	DN25	266	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-40	W-039144	Ø101.6	Ø209	DN40	DN25	266	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-38	W-039145	DN150	Ø209	Ø38	Ø25	266	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-38	W-039146	DN125	Ø209	Ø38	Ø25	266	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-38	W-039147	DN100	Ø209	Ø38	Ø25	266	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-38	W-039148	Ø101.6	Ø209	Ø38	Ø25	266	500	1019	343	163 pc Ø12x1mm



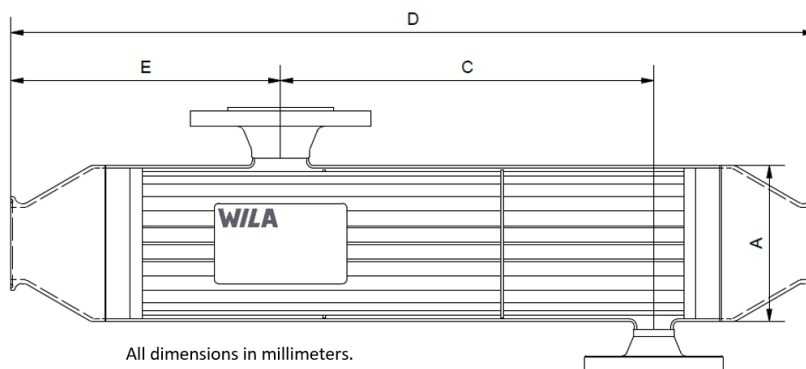
TSH-04-209-40-F		40 barg / 85°C		4 bar[g] / 152°C			Maximum pressure / temperature			
		Volume 15.5 liters		Volume 10.5 liters			316L Concentric		Dry weight 53 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-82F	W-039253	DN150	Ø209	DN80	DN40	309	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-82F	W-039254	DN125	Ø209	DN80	DN40	309	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-82F	W-039255	DN100	Ø209	DN80	DN40	309	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-82F	W-039256	Ø101.6	Ø209	DN80	DN40	306	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-70F	W-039257	DN150	Ø209	DN65	DN40	304	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-70F	W-039258	DN125	Ø209	DN65	DN40	304	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-70F	W-039259	DN100	Ø209	DN65	DN40	304	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-70F	W-039260	Ø101.6	Ø209	DN65	DN40	304	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-54F	W-039261	DN150	Ø209	DN50	DN25	301	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-54F	W-039262	DN125	Ø209	DN50	DN25	301	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-54F	W-039263	DN100	Ø209	DN50	DN25	301	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-54F	W-039264	Ø101.6	Ø209	DN50	DN25	301	500	1019	343	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-04-209-150-43F	W-039265	DN150	Ø209	DN40	DN25	298	500	935	301	163 pc Ø12x1mm
TSH-04-209-125-43F	W-039266	DN125	Ø209	DN40	DN25	298	500	979	323	163 pc Ø12x1mm
TSH-04-209-100-43F	W-039267	DN100	Ø209	DN40	DN25	298	500	1019	343	163 pc Ø12x1mm
TSH-04-209-101-43F	W-039268	Ø101.6	Ø209	DN40	DN25	298	500	1019	343	163 pc Ø12x1mm



All dimensions in millimeters.

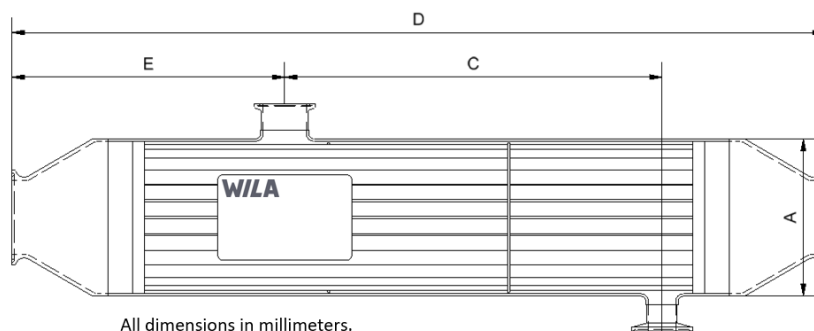


TSH-06-209-40		40 barg / 85°C		3 bar[g] / 144°C			Maximum pressure / temperature			
		Volume 20 liters		Volume 15.5 liters			316L Concentric			Dry weight 76 kg
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-80	W-039149	DN150	Ø209	DN80	DN40	272	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-80	W-039150	DN125	Ø209	DN80	DN40	272	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-80	W-039151	DN100	Ø209	DN80	DN40	272	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-80	W-039152	Ø101.6	Ø209	DN80	DN40	272	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-76	W-039153	DN150	Ø209	Ø76.1	Ø38	266	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-76	W-039154	DN125	Ø209	Ø76.1	Ø38	266	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-76	W-039155	DN100	Ø209	Ø76.1	Ø38	266	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-76	W-039156	Ø101.6	Ø209	Ø76.1	Ø38	266	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-65	W-039157	DN150	Ø209	DN65	DN40	272	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-65	W-039158	DN125	Ø209	DN65	DN40	272	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-65	W-039159	DN100	Ø209	DN65	DN40	272	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-65	W-039160	Ø101.6	Ø209	DN65	DN40	272	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-63	W-039161	DN150	Ø209	Ø63.5	Ø38	266	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-63	W-039162	DN125	Ø209	Ø63.5	Ø38	266	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-63	W-039163	DN100	Ø209	Ø63.5	Ø38	266	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-63	W-039164	Ø101.6	Ø209	Ø63.5	Ø38	266	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-50	W-039165	DN150	Ø209	DN50	DN25	266	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-50	W-039166	DN125	Ø209	DN50	DN25	266	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-50	W-039167	DN100	Ø209	DN50	DN25	266	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-50	W-039168	Ø101.6	Ø209	DN50	DN25	266	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-51	W-039169	DN150	Ø209	Ø51	Ø25	266	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-51	W-039170	DN125	Ø209	Ø51	Ø25	266	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-51	W-039171	DN100	Ø209	Ø51	Ø25	266	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-51	W-039172	Ø101.6	Ø209	Ø51	Ø25	266	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-40	W-039173	DN150	Ø209	DN40	DN25	266	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-40	W-039174	DN125	Ø209	DN40	DN25	266	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-40	W-039175	DN100	Ø209	DN40	DN25	266	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-40	W-039176	Ø101.6	Ø209	DN40	DN25	266	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-38	W-039177	DN150	Ø209	Ø38	Ø25	266	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-38	W-039178	DN125	Ø209	Ø38	Ø25	266	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-38	W-039179	DN100	Ø209	Ø38	Ø25	266	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-38	W-039180	Ø101.6	Ø209	Ø38	Ø25	266	685	1399	538	163 pc Ø12x1mm



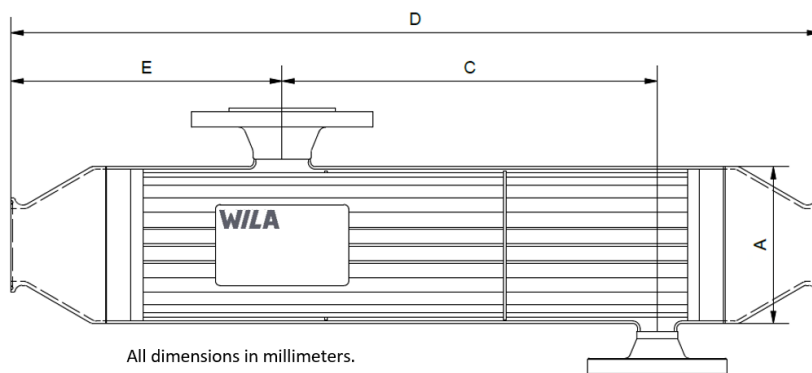
All dimensions in millimeters.

TSH-06-209-40-F		40 barg / 85°C		3 bar[g] / 144°C		Maximum pressure / temperature				
		Volume 20 liters		Volume 15.5 liters		316L Concentric		Dry weight 76 kg		
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-82F	W-039269	DN150	Ø209	DN80	DN40	309	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-82F	W-039270	DN125	Ø209	DN80	DN40	309	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-82F	W-039271	DN100	Ø209	DN80	DN40	309	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-82F	W-039272	Ø101.6	Ø209	DN80	DN40	306	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-70F	W-039273	DN150	Ø209	DN65	DN40	304	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-70F	W-039274	DN125	Ø209	DN65	DN40	304	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-70F	W-039275	DN100	Ø209	DN65	DN40	304	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-70F	W-039276	Ø101.6	Ø209	DN65	DN40	304	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-54F	W-039277	DN150	Ø209	DN50	DN25	301	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-54F	W-039278	DN125	Ø209	DN50	DN25	301	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-54F	W-039279	DN100	Ø209	DN50	DN25	301	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-54F	W-039280	Ø101.6	Ø209	DN50	DN25	301	685	1399	538	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-06-209-150-43F	W-039281	DN150	Ø209	DN40	DN25	298	685	1315	496	163 pc Ø12x1mm
TSH-06-209-125-43F	W-039282	DN125	Ø209	DN40	DN25	298	685	1359	518	163 pc Ø12x1mm
TSH-06-209-100-43F	W-039283	DN100	Ø209	DN40	DN25	298	685	1399	538	163 pc Ø12x1mm
TSH-06-209-101-43F	W-039284	Ø101.6	Ø209	DN40	DN25	298	685	1399	538	163 pc Ø12x1mm



All dimensions in millimeters.

TSH-08-209-40		40 barg / 85°C		2.3 bar[g] / 136°C		Maximum pressure / temperature				
		Volume 26 liters		Volume 21.5 liters		316L Concentric		Dry weight 101 kg		
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-80	W-039181	DN150	Ø209	DN80	DN40	272	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-80	W-039182	DN125	Ø209	DN80	DN40	272	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-80	W-039183	DN100	Ø209	DN80	DN40	272	955	1814	686	163 pc Ø12x1mm
TSH-08-209-101-80	W-039184	Ø101.6	Ø209	DN80	DN40	272	955	1814	686	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-76	W-039185	DN150	Ø209	Ø76.1	Ø38	266	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-76	W-039186	DN125	Ø209	Ø76.1	Ø38	266	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-76	W-039187	DN100	Ø209	Ø76.1	Ø38	266	955	1814	686	163 pc Ø12x1mm
TSH-08-209-101-76	W-039188	Ø101.6	Ø209	Ø76.1	Ø38	266	955	1814	686	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-65	W-039189	DN150	Ø209	DN65	DN40	272	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-65	W-039190	DN125	Ø209	DN65	DN40	272	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-65	W-039191	DN100	Ø209	DN65	DN40	272	955	1814	686	163 pc Ø12x1mm
TSH-08-209-101-65	W-039192	Ø101.6	Ø209	DN65	DN40	272	955	1814	686	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-63	W-039193	DN150	Ø209	Ø63.5	Ø38	266	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-63	W-039194	DN125	Ø209	Ø63.5	Ø38	266	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-63	W-039195	DN100	Ø209	Ø63.5	Ø38	266	955	1814	686	163 pc Ø12x1mm
TSH-08-209-101-63	W-039196	Ø101.6	Ø209	Ø63.5	Ø38	266	955	1814	686	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-50	W-039197	DN150	Ø209	DN50	DN25	266	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-50	W-039198	DN125	Ø209	DN50	DN25	266	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-50	W-039199	DN100	Ø209	DN50	DN25	266	955	1814	686	163 pc Ø12x1mm
TSH-08-209-101-50	W-039200	Ø101.6	Ø209	DN50	DN25	266	955	1814	686	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-51	W-039201	DN150	Ø209	Ø51	Ø25	266	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-51	W-039202	DN125	Ø209	Ø51	Ø25	266	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-51	W-039203	DN100	Ø209	Ø51	Ø25	266	955	1814	686	163 pc Ø12x1mm
TSH-08-209-101-51	W-039204	Ø101.6	Ø209	Ø51	Ø25	266	955	1814	686	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-40	W-039205	DN150	Ø209	DN40	DN25	266	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-40	W-039206	DN125	Ø209	DN40	DN25	266	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-40	W-039207	DN100	Ø209	DN40	DN25	266	955	1814	686	163 pc Ø12x1mm
TSH-08-209-101-40	W-039208	Ø101.6	Ø209	DN40	DN25	266	955	1814	686	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-38	W-039209	DN150	Ø209	Ø38	Ø25	266	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-38	W-039210	DN125	Ø209	Ø38	Ø25	266	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-38	W-039211	DN100	Ø209	Ø38	Ø25	266	955	1814	686	163 pc Ø12x1mm
TSH-08-209-101-38	W-039212	Ø101.6	Ø209	Ø38	Ø25	266	955	1814	686	163 pc Ø12x1mm



All dimensions in millimeters.

TSH-08-209-40-F		40 barg / 85°C		2.3 bar[g] / 136°C			Maximum pressure / temperature			
		Volume 26 liters		Volume 21.5 liters			316L Concentric		Dry weight 101 kg	
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-82F	W-039285	DN150	Ø209	DN80	DN40	309	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-82F	W-039286	DN125	Ø209	DN80	DN40	309	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-82F	W-039287	DN100	Ø209	DN80	DN40	309	955	1814	683	163 pc Ø12x1mm
TSH-08-209-101-82F	W-039288	Ø101.6	Ø209	DN80	DN40	306	955	1814	683	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-70F	W-039289	DN150	Ø209	DN65	DN40	304	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-70F	W-039290	DN125	Ø209	DN65	DN40	304	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-70F	W-039291	DN100	Ø209	DN65	DN40	304	955	1814	683	163 pc Ø12x1mm
TSH-08-209-101-70F	W-039292	Ø101.6	Ø209	DN65	DN40	304	955	1814	683	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-54F	W-039293	DN150	Ø209	DN50	DN25	301	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-54F	W-039294	DN125	Ø209	DN50	DN25	301	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-54F	W-039295	DN100	Ø209	DN50	DN25	301	955	1814	683	163 pc Ø12x1mm
TSH-08-209-101-54F	W-039296	Ø101.6	Ø209	DN50	DN25	301	955	1814	683	163 pc Ø12x1mm
Stock number	Drawing number	P1/P2	A	S1	S2	B	C	D	E	Tube bank
TSH-08-209-150-43F	W-039297	DN150	Ø209	DN40	DN25	298	955	1730	641	163 pc Ø12x1mm
TSH-08-209-125-43F	W-039298	DN125	Ø209	DN40	DN25	298	955	1774	663	163 pc Ø12x1mm
TSH-08-209-100-43F	W-039299	DN100	Ø209	DN40	DN25	298	955	1814	683	163 pc Ø12x1mm
TSH-08-209-101-43F	W-039300	Ø101.6	Ø209	DN40	DN25	298	955	1814	683	163 pc Ø12x1mm