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ATSx STAINLESS STEEL RANGE

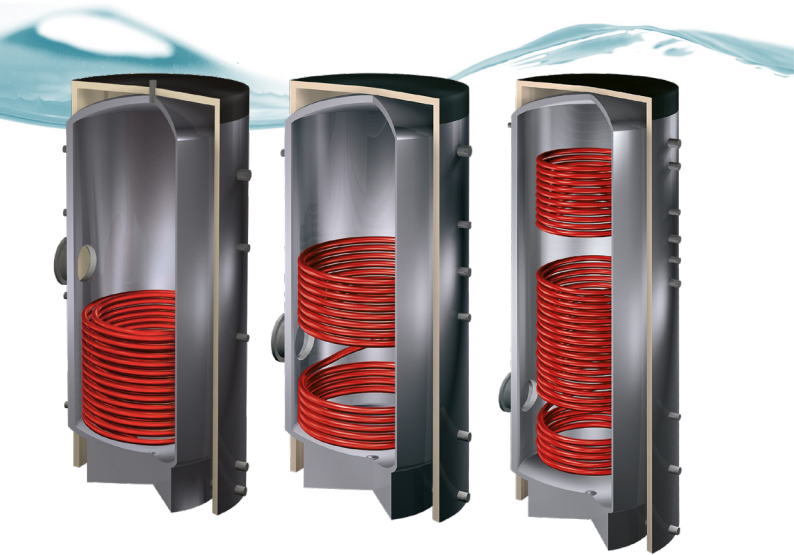
BUFFER & INDIRECT HOT WATERS CALORIFIERS

We can help you achieve

NET ZERO
by **2050**

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Adveco ATsx Stainless Steel Range



The Adveco ATsx range of stainless steel hot water tanks serve as buffer vessels and indirect hot water calorifiers suitable for use with lower capacity, high pressure commercial applications in soft water areas...

- Vessels rated up to 1000 litres
- 10 bar as standard
- Single coil, twin coil and plate heat exchanger options for maximising transfer of energy
- Corrosion resistant stainless steel construction



Designed For All Water Types

The ATSt Range is constructed from highly resilient AISI 316Ti and 316L stainless steel making it the ideal choice for projects in the UK, no matter the water quality.

In naturally soft water conditions, despite the use of sacrificial anodes, glass-lined vessels can rapidly succumb to critical corrosive damage. For this reason, commercial hot water systems in Scotland, the northwest and southwest of England and the west of Wales where water is particularly soft will typically need to employ a stainless steel appliance. Better able to stand up to water-side assaults, a stainless steel vessel is less susceptible to corrosion due to the composition of the alloys, which create a protective oxide barrier on the waterside that naturally helps prevent corrosion, even when temperatures increase. Able to withstand higher temperature water (in excess of 80°C) than glass-lined appliances, the ATSt stainless steel range lends itself to a wide mix of commercial applications, including those leveraging the advantages of Solar Thermal preheat to reduce carbon.

For hard water areas where scale build up can prove problematic, Advenco can specify 9kW and 12kW electric immersions with a uniquely low 6W/cm² heat intensity. Without detrimental effect to the demands for hot water, this considerably lower heat intensity (compared to 18W/cm² typically seen in domestic immersion heaters) slows the potential for scale build-up.

This makes the ATSt range a resilient option for projects whether water is naturally hard or soft.



- UK soft or moderately soft water areas
- UK harder water areas

The ATSt Range At A Glance

- **ATSB** – Storage/buffer tank without coils
- **ATSI** – Single coil indirect water heater
- **ATST** – Twin coil indirect water heater
- **ATSH** – Single high-capacity coil indirect water heater

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High Pressure Applications

The ATSx range offers a wide choice of vessels all rated to 10 bar as standard. This makes them perfect for higher-pressure applications, such as taller buildings with basement plant rooms. Apartments, small hotels and B&Bs in soft water areas are good examples of where these compact tanks excel.

As with any hot water application, understanding the relationship between storage and recovery, and correct sizing is extremely important for efficient and cost-effective operation. Integrating an ATSx stainless steel calorifier within a hot water system gives you a number of design options. At 200 to 1000 litres the ATSx range provides a compact, tough resolution for lower hot water demand applications. With a large, efficient boiler an ATSx calorifier can be smaller avoiding unnecessary capital costs and providing greater choice when plantroom space is at a premium. By being better sized to the building's demands it also helps to reduce ongoing operational expenditure. If your project has pressure requirements greater than six bar, then the ATSx vessels are by far the most efficient and cost-effective choice for your project.

For projects with larger demands or requiring greater customisation Adveco provides the larger format SSB, SSI and SST ranges of bespoke stainless steel calorifiers and buffer vessels.



10 Bar

200-1000 Litre



Adveco ATSB

Stainless Steel Buffer Cylinders

The ATSB is a high-quality buffer vessel featuring multiple connection points as well as a clean-out access flange.



Features

- Available with 200 - 1000 litre capacities
- Produced from high quality 316Ti and 316L stainless steel
- 100 mm removable insulation for improved energy efficiency
- Suitable for vented or unvented installation
- 10 bar / 95°C max. working pressure/temp (tank)
- 25 bar / 200°C max. working pressure/temp (coil)

Options & Ancillaries

- E0008/0-95C: Control Thermostat with 0-95°C range
- E0011: Overheat thermostat
- E0009.2: Chrome thermostat pocket (two included with vessel)
- MB0001: Destratification pump kit
- Unvented Kits: Contact Adveco for options and details

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Adveco ATSI

Stainless Steel Indirect Cylinders

The ATSI is a high-quality indirect water heater.

Each vessel features a single internal fixed heating coil at low level for use with an indirect heat source, as well as multiple connection points and a clean-out access flange.



Features

- Available with 200 - 1000 litre capacities
- Produced from high quality 316Ti and 316L stainless steel
- 100 mm removable insulation for improved energy efficiency
- Suitable for vented or unvented installation
- 10 bar / 95°C max. working pressure/temp (tank)
- 25 bar / 200°C max. working pressure/temp (coil)

Options & Ancillaries

- E0008/0-95C: Control Thermostat with 0-95°C range
- E0011: Overheat thermostat
- E0009.2: Chrome thermostat pocket (two included with vessel)
- MB0001: Destratification pump kit
- Unvented Kits: Contact Adveco for options and details



Advenco ATST

Stainless Steel Twin-Coil Cylinders

The ATST is a high-quality indirect water heater.

Each vessel features two internal fixed heating coils, at low and high level, for use with indirect heat sources, as well as multiple connection points and a clean-out access flange.



Features

- Available with 200 - 1000 litre capacities
- Produced from high quality 316Ti and 316L stainless steel
- 100 mm removable insulation for improved energy efficiency
- Suitable for vented or unvented installation
- 10 bar / 95°C max. working pressure/temp (tank)
- 25 bar / 200°C max. working pressure/temp (coil)

Options & Ancillaries

- E0008/0-95C: Control Thermostat with 0-95°C range
- E0011: Overheat thermostat
- E0009.2: Chrome thermostat pocket (two included with vessel)
- MB0001: Destratification pump kit
- Unvented Kits: Contact Advenco for options and details

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Adveco ATSH

Stainless Steel High Capacity Cylinders

The ATSH is a high-quality indirect water heater.

Each vessel features a single internal high capacity fixed heating coil at low level for use with a high powered indirect heat source, as well as multiple connection points and a clean-out access flange.



Features

- Available with 200 - 1000 litre capacities
- Produced from high quality 316Ti and 316L stainless steel
- 100 mm removable insulation for improved energy efficiency
- Suitable for vented or unvented installation
- 10 bar / 95°C max. working pressure/temp (tank)
- 25 bar / 200°C max. working pressure/temp (coil)

Options & Ancillaries

- E0008/0-95C: Control Thermostat with 0-95°C range
- E0011: Overheat thermostat
- E0009.2: Chrome thermostat pocket (two included with vessel)
- MB0001: Destratification pump kit
- Unvented Kits: Contact Adveco for options and details



Adveco ATSR

Stainless Steel Renewables Cylinders

The ATSR is a high-quality indirect water heater.

Each vessel features two internal fixed heating coils with an increased surface area designed for use with renewable heat sources, at low and high level, as well as multiple connection points and a clean-out access flange.



Features

- Available with 200 - 1000 litre capacities
- Produced from high quality 316Ti and 316L stainless steel
- 100 mm removable insulation for improved energy efficiency
- Suitable for vented or unvented installation
- 10 bar / 95°C max. working pressure/temp (tank)
- 10 bar / 95-110°C max. working pressure/temp (coils)

Options & Ancillaries

- E0008/0-95C: Control Thermostat with 0-95°C range
- E0011: Overheat thermostat
- E0009.2: Chrome thermostat pocket (two included with vessel)
- MB0001: Destratification pump kit
- Unvented Kits: Contact Adveco for options and details

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Adveco ATSB Technical Data

Dimensions

Label	Description	200	300	350	400	500	580	750	860	1000
H	Height incl. insulation	1485	1735	1930	1725	1975	1985	2055	2045	2045
D _o	Outer diameter including insulation	Ø700	Ø700	Ø700	Ø800	Ø800	Ø850	Ø950	Ø1000	Ø1050
D _i	Inner diameter	Ø500	Ø500	Ø500	Ø600	Ø600	Ø650	Ø750	Ø800	Ø850
c	Cold water inlet / external heat exchanger return	295	295	295	320	320	320	360	355	355
h	Hot water outlet	1125	1375	1625	1390	1610	1610	1660	1655	1655
f	Connection for external heat exchanger flow	945	1195	1445	1190	1410	1410	1460	1455	1455
y	Secondary return	845	985	1235	1010	1110	1110	1160	1155	1155
s1	Sensor pocket	295	295	295	320	320	320	360	355	355
s2	Sensor pocket	745	885	1135	910	960	960	1010	1005	1005
s3	Sensor pocket	1035	1285	1535	1290	1510	1510	1560	1555	1555
e	Flange centre point	460	460	460	520	520	520	560	555	555
n	Drain	60	60	60	60	60	60	60	60	60

All threaded connections are Rp female unless otherwise stated. All dimensions in mm.



Adveco ATSB Technical Data

Specification

Description		200	300	350	400	500	580	750	860	1000
Volume (l)		212	289	339	411	490	575	756	864	990
Energy efficiency class		B	B	B	B	B	C	C	C	C
Standing losses	W	53	65	70	75	83	106	120	129	140
	kWh/24h	1.27	1.56	1.68	1.80	1.99	2.54	2.88	3.10	3.36
Dry mass (kg)		45	51	57	60	68	76	115	125	150

Connections

Label	Description	200	300	350	400	500	580	750	860	1000
c	Cold water inlet / external heat exchanger return	1 ¼"	1 ¼"	1 ¼"	1 ½"	1 ½"	1 ½"	2"	2"	2"
h	Hot water outlet	1 ¼"	1 ¼"	1 ¼"	1 ½"	1 ½"	1 ½"	2"	2"	2"
f	Connection for external heat exchanger flow	1 ¼"	1 ¼"	1 ¼"	1 ½"	1 ½"	1 ½"	2"	2"	2"
y	Secondary return	1"	1"	1"	1"	1"	1 "	1"	1"	1"
a	Air vent connection	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	½"
s1, s2, s3	Sensor pockets	½"	½"	½"	½"	½"	½"	½"	½"	½"
e	Clean-out flange (mm)	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120
n	Drain	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"

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Adveco ATSI Technical Data

Dimensions

Label	Description	200	300	350	400	500	580	750	1000
H	Height including insulation	1480	1740	1940	1735	1990	1190	2080	2080
D _o	Outer diameter Including insulation	Ø700	Ø700	Ø700	Ø800	Ø800	Ø850	Ø950	Ø1050
D _i	Inner diameter	Ø500	Ø500	Ø500	Ø600	Ø600	Ø650	Ø750	Ø850
c	Cold water inlet	60	65	65	65	65	65	80	80
h	Hot water outlet	1135	1395	1645	1240	1670	1670	1705	1705
f	Flow from heat source	690	880	890	875	1120	1085	1080	855
r	Return to heat source	180	190	120	215	215	215	270	265
y	Secondary return	690	1120	1390	1060	1305	1305	1330	1330
s1	Sensor pocket	610	700	700	700	750	750	830	505
s2	Sensor pocket	1155	1415	1665	1440	1690	1690	1745	1745
e	Flange centre point	450	440	440	465	515	500	615	595

All threaded connections are Rp female unless otherwise stated. All dimensions in mm.



Adveco ATSI Technical Data

Specification

Description		200	300	350	400	500	580	750	1000
Volume (l)		212	289	339	411	490	575	756	990
Energy efficiency class		B	B	B	B	B	C	C	C
Standing losses	W	52	63	68	72	79	102	116	135
	kWh/24h	1.25	1.51	1.63	1.73	1.90	2.45	2.78	3.24
Dry mass (kg)		54	64	75	76	90	95	142	173
Nominal flow rate (m³/h)		1.03	1.60	1.60	1.95	1.95	2.06	2.75	2.75
Lower coil surface area (m²)		0.9	1.4	1.4	1.7	1.7	1.8	2.4	2.4
Output capacity (80/60:10/60) (kW)		19.1	29.7	29.7	36.1	36.1	38.3	51.0	51.0
DHW flow rate (80/60:10/60) (l/h)		327.8	509.7	509.7	619.5	619.5	657.2	875.2	875.2
DHW peak half hour flow (l)		306	444	484	587	650	734	969	1157
DHW peak hour flow (l)		472	702	742	901	964	1067	1413	1600
DHW peak two hour flow (l)		798	1208	1248	1516	1589	1720	2282	2469

Connections

Label	Description	200	300	350	400	500	580	750	1000
c	Cold water inlet	¾"	1"	1"	1"	1"	1 ½"	1 ½"	2"
h	Hot water outlet	¾"	1"	1"	1"	1"	1 ½"	1 ½"	2"
f, r	Flow/return from heat source	1"	1"	1"	1"	1"	1"	1 ¼"	1 ¼"
y	Secondary return	½"	¾"	¾"	¾"	¾"	¾"	¾"	1"
a	Air vent connection	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
s1	Sensor pocket	½"	½"	¾"	½"	½"	¾"	½"	½"
s2	Sensor pocket	½"	½"	½"	½"	½"	½"	½"	½"
e	Clean-out flange (mm)	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120

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Adveco ATST Technical Data

Dimensions

Label	Description	300	350	400	500	580	750	1000
H	Height including insulation	1740	1940	1735	1990	1990	2080	2080
D _o	Outer diameter Including insulation	Ø700	Ø700	Ø800	Ø800	Ø850	Ø950	Ø1050
D _i	Inner diameter	Ø500	Ø500	Ø600	Ø600	Ø650	Ø750	Ø850
c	Cold water inlet	65	65	65	65	65	80	80
h	Hot water outlet	1410	1610	1425	1670	1660	1710	1705
f1	Flow from heat source (lower)	830	890	845	995	1085	1080	855
r1	Return to heat source (lower)	190	190	215	215	215	505	265
f2	Flow from heat source (upper)	1310	1385	1320	1560	1555	1580	1375
r2	Return to heat source (upper)	1020	1055	1065	1200	1295	1300	1095
y	Secondary return	925	965	960	1100	1190	1200	975
s1	Sensor pocket	380	390	405	455	390	505	505
s2	Sensor pocket	1130	1165	1150	1320	1390	1410	1200
s3	Sensor pocket	1415	1665	1440	1690	1665	1745	1745
e	Flange centre point	440	440	465	515	465	565	565

All threaded connections are Rp female unless otherwise stated. All dimensions in mm.



Adveco ATST Technical Data

Specification

Description	300	350	400	500	580	750	1000
Volume (l)	289	339	411	490	575	756	990
Energy efficiency class	B	B	B	B	C	C	C
Standing losses	W	66	71	76	83	105	140
	kWh/24h	1.58	1.70	1.82	1.99	2.52	3.36
Dry mass (kg)	72	85	90	110	105	160	200
Nominal flow rate (m³/h) (upper, lower coil)	3, 3	3, 4	3.5, 4	4, 4	4, 4	4, 5	4, 5
Surface area (m²) (upper, lower coil)	0.8, 1.4	0.9, 1.4	0.9, 1.7	0.9, 1.7	0.9, 1.8	1.4, 2.4	1.8, 2.4
Output capacity (80/60:10/60) (kW) (upper, lower coil)	17.0, 29.7	19.1, 29.7	19.1, 36.1	19.1, 36.1	19.1, 38.3	29.7, 51.0	38.3, 59.0
DHW flow rate (80/60:10/60) (l/h)	801.4	837.4	947.2	947.2	985.0	1384.8	1669.7
DHW peak half hour flow (l)	565	620	723	787	870	1182	1488
DHW peak hour flow (l)	971	1044	1203	1266	1369	1883	2333
DHW peak two hour flow (l)	1767	1876	2144	2208	2348	3259	3992

Connections

Label	Description	300	350	400	500	580	750	1000
c	Cold water inlet	1"	1"	1"	1"	1 ½"	1 ½"	2"
h	Hot water outlet	1"	1"	1"	1"	1 ½"	1 ½"	2"
f, r	Heat exchanger connections	1"	1"	1"	1"	1"	1 ¼"	1 ¼"
y	Secondary return	¾"	¾"	¾"	¾"	¾"	¾"	1"
a	Air vent connection	¾"	¾"	¾"	¾"	¾"	¾"	¾"
s1, s2, s3	Sensor pocket	½"	½"	½"	½"	½"	½"	½"
e	Clean-out flange (mm)	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120

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Adveco ATSH Technical Data

Dimensions

Label	Description	200	300	400	500	750	1000
H	Height including insulation	1490	1740	1735	1985	2075	2075
D _o	Outer diameter Including insulation	Ø700	Ø700	Ø800	Ø800	Ø950	Ø1050
D _i	Inner diameter	Ø500	Ø500	Ø600	Ø600	Ø750	Ø850
c	Cold water inlet	70	70	70	70	70	70
h	Hot water outlet	1145	1395	1420	1670	1700	1700
f	Flow from heat source	585	775	830	885	905	905
r	Return to heat source	195	195	215	215	255	255
y	Secondary return	880	1180	1150	1400	1350	1350
s1	Sensor pocket	285	285	310	310	360	360
s2	Sensor pocket	650	815	895	950	960	960
s3	Sensor pocket	950	1240	1200	1490	1400	1400
s4	Sensor pocket	1165	1415	1440	1690	1740	1740
e	Flange centre point	800	975	1035	1090	1130	1130

All threaded connections are Rp female unless otherwise stated. All dimensions in mm.



Adveco ATSH Technical Data

Specifications

Description		200	300	400	500	750	1000
Volume (l)		212	289	411	490	756	990
Energy efficiency class		B	B	C	C	C	C
Standing losses	W	58	66	85	98	120	140
	kWh/24h	1.39	1.58	2.04	2.35	2.88	3.36
Dry mass (kg)		79	96	128	139	185	208
Lower coil surface area (m²)		1.8	2.6	3.8	4.0	5.0	7.0
Output capacity (80/60:10/60) (kW)		38.3	55.3	80.8	85.1	106.4	148.9
DHW flow rate (80/60:10/60) (l/h)		657.2	948.9	1386.5	1460.3	1825.8	2555.1
DHW peak half hour flow (l)		443	627	907	1000	1366	1857
DHW peak hour flow (l)		776	1107	1609	1740	2290	3151
DHW peak two hour flow (l)		1429	2050	2986	3191	4104	5689

Connections

Label	Description	200	300	400	500	750	1000
c	Cold water inlet	1"	1"	1 ½"	1 ½"	2"	2"
h	Hot water outlet	1"	1"	1 ½"	1 ½"	2"	2"
f, r	Heat exchanger flow and return	1"	1"	1"	1"	1 ½"	1 ½"
y	Secondary return	¾"	¾"	¾"	¾"	¾"	¾"
a	Air vent connection	1"	1"	1"	1"	1"	1"
s1, s2, s3, s4	Sensor pocket	½"	½"	½"	½"	½"	½"
e	Clean-out flange (mm)	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120

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Adveco ATSR Technical Data

Dimensions

Label	Description	300	400	500	750	1000
H	Total height including insulation	1740	1975	1985	2080	2090
D _o	Outer diameter Including insulation	Ø700	Ø750	Ø800	Ø950	Ø1050
D _i	Inner diameter	Ø500	Ø550	Ø600	Ø750	Ø850
c	Cold water inlet	65	65	65	65	80
h	Hot water outlet	1395	1670	1670	1725	1735
f1	Flow from heat source (lower)	610	640	615	730	775
r1	Return to heat source (lower)	190	215	215	270	275
f2	Flow from heat source (upper)	1270	1515	1545	1540	1480
r2	Return to heat source (upper)	790	925	865	890	940
y	Secondary return	1120	1330	1285	1430	1480
s1	Sensor pocket	540	325	330	420	420
s2	Sensor pocket	845	980	950	1060	1110
s3	Sensor pocket	1315	1590	1590	1645	1655
s4	Sensor pocket	1415	1690	1690	1745	1755
e	Flange centre point	700	780	740	810	860

All threaded connections are Rp female unless otherwise stated. All dimensions in mm.



Adveco ATSR Technical Data

Specifications

Description		300	400	500	750	1000
Volume (l)		300	400	500	750	1000
Energy efficiency class		B	C	C	C	C
Standing losses	W	66	85	98	120	140
	kWh/24h	1.58	2.04	2.35	2.88	3.36
Dry mass (kg)		75	86	137	175	268
Surface area (m²)	Upper coil	2.5	3.0	4.5	5.5	6.5
	Lower coil	1.4	1.5	1.6	2.5	2.8
Output capacity upper coil (80/45:10) (kW)		37	39	42	66	74
Output capacity lower coil (55/45:10) (kW)		29	35	53	65	77

Connections

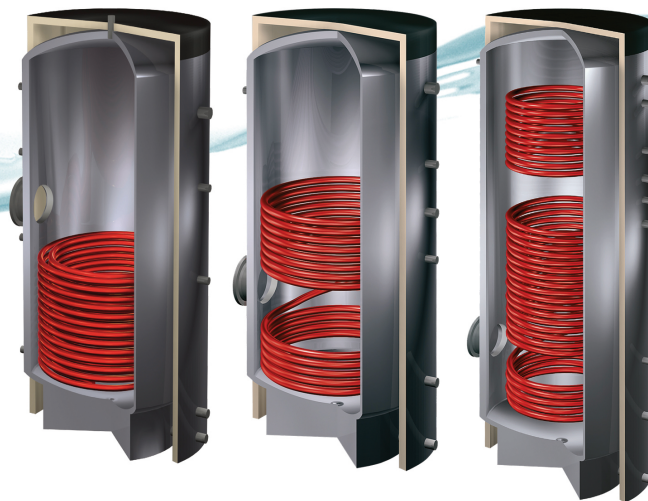
Label	Description	300	400	500	750	1000
c	Cold water inlet	1 ¼"	1 ½"	1 ½"	1 ½"	2"
h	Hot water outlet	1 ¼"	1 ½"	1 ½"	1 ½"	2"
f1, r1	Lower heat exchanger flow/return	1 ¼"	1 ¼"	1 ¼"	1 ½"	1 ½"
f2, r2	Upper heat exchanger flow/return	1"	1"	1 ¼"	1 ¼"	1 ¼"
y	Secondary return	¾"	¾"	¾"	¾"	¾"
a	Air vent connection	1"	1"	1"	1"	1"
s1, s2, s3, s4	Sensor pockets	½"	½"	½"	½"	½"
e	Clean-out flange (mm)	Ø180/120	Ø180/120	Ø180/120	Ø180/120	Ø180/120

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by **2050**



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SR200373
ATSx STAINLESS STEEL RANGE PRODUCT GUIDE



1971 - 2021