Glass lined calorifier with fixed coil
SFV - With one heat exchanger
DSFV - With two heat exchangers

Calorifiers made of glass lined steel designed for the production and storage of domestic hot water (DHW).
They are equipped with one or two internal fixed coils that can be fed by a solar system and/or a boiler.
The wide range of capacities (from 150 to 2000 litres), the high level of quality and its resistance to the high temperatures (up to 95 °C), are the strength points of this product.
Cylinders are also prepared to host a backup immersion heater (not supplied).

HEAT SOURCE

APPLICATION

TECHNICAL FEATURES

DHW cylinder	**Material**	Glass lined S 235 Jr Carbon steel
	Internal protective treatment	Enamelling according to DIN 4753.3
	External protective treatment	Anti rust protection + epoxy painting
	Rating (P max. / T max.)	8 bar / 95°C
	Cathodic protection	Magnesium anode
Heat exchanger	**Material**	Glass lined S 235 Jr Carbon steel
	Internal protective treatment	None
	External protective treatment	Enamelling according to DIN 4753.3
	Type	Fixed coil
	Rating (P max. / T max.)	10 bar / 95°C
General features	**Capacity**	150 - 2000 L
	Warranty	5 years
	Insulation	- Rigid polyurethane foam + PVC: Fire retardant class B3 (DIN 4102) - Soft insulation with polyester + PVC: Fire retardant class B2 (DIN 4102)
	In compliance with	- Pressure Equipment Directive (PED) 2014/68/UE Art. 4 Para 3 - Italian MOH specifications (products suitable to contain potable water) - Energy related Products (Erp) Directive 2009/125/CE

ACCESSORIES (page 218)

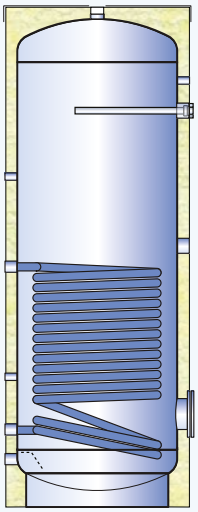
Impressed current electronic anode

Electronic control unit

Thermostat

Thermometer

1"½ electric immersion heater

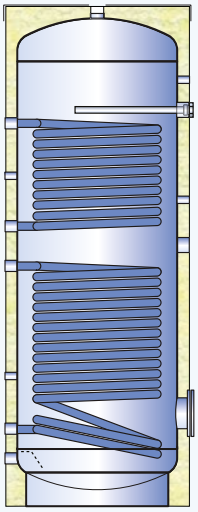


SFV - Hard insulation with rigid polyurethane foam and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	HEAT EXCHANGER (m^2) / (L) *
SFV 00150 R	50	B	49,7	148,0	0,85 / 8,3
SFV 00200 R	50	B	56,7	189,8	0,90 / 8,8
SFV 00300 R	50	B	68,2	290,3	1,30 / 12,7
SFV 00400 R	50	B	72,0	414,9	1,60 / 15,7
SFV 00500 R	50	B	80,6	500,3	1,95 / 19,1
SFV 00800 R	100	C	105,9	749,8	2,70 / 26,5
SFV 01000 R	100	C	109,7	931,5	3,00 / 29,4
SFV 01500 R	100	C	132,3	1474,3	3,70 / 36,3
SFV 02000 R	100	C	142,2	1951,9	4,80 / 47,0

SFV - Soft insulation with polyester and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	HEAT EXCHANGER (m^2) / (L) *
SFV 00800 F	130	C	125,9	749,8	2,70 / 26,5
SFV 01000 F	130	C	137,9	931,5	3,00 / 29,4
SFV 01500 F	130	C	168,1	1474,3	3,70 / 36,3
SFV 02000 F	130	C	181,4	1951,9	4,80 / 47,0



DSFV - Hard insulation with rigid polyurethane foam and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	LOWER HEAT EXCHANGER (m^2) / (L) *	UPPER HEAT EXCHANGER (m^2) / (L) *
DSFV 00200 R	50	B	56,7	189,8	0,90 / 8,8	0,50 / 4,9
DSFV 00300 R	50	B	68,2	290,3	1,30 / 12,7	0,85 / 8,3
DSFV 00400 R	50	B	72,0	414,9	1,60 / 15,7	0,90 / 8,8
DSFV 00500 R	50	B	80,6	500,3	1,95 / 19,1	1,10 / 10,8
DSFV 00800 R	100	C	105,9	749,8	2,70 / 26,5	1,50 / 14,7
DSFV 01000 R	100	C	109,7	931,5	3,00 / 29,4	1,90 / 18,6
DSFV 01500 R	100	C	132,3	1474,3	3,70 / 36,3	2,30 / 22,5
DSFV 02000 R	100	C	142,2	1951,9	4,80 / 47,0	3,00 / 29,4

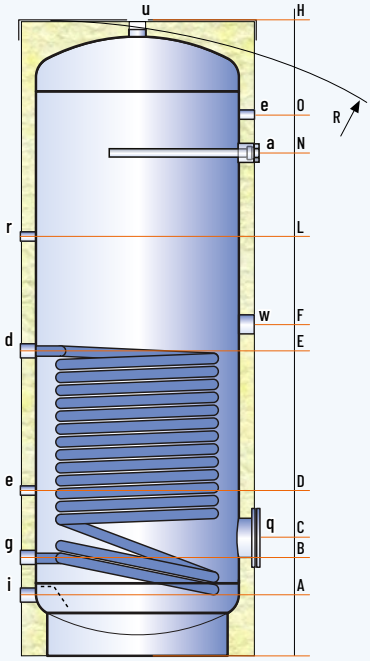
DSFV - Soft insulation with polyester and PVC jacket

CODE	INSULATION THICK. (mm)	ErP CLASS	HEAT LOSS S (W)	REAL CAPACITY (L)	LOWER HEAT EXCHANGER (m^2) / (L) *	UPPER HEAT EXCHANGER (m^2) / (L) *
DSFV 00800 F	130	C	125,9	749,8	2,70 / 26,5	1,50 / 14,7
DSFV 01000 F	130	C	137,9	931,5	3,00 / 29,4	1,90 / 18,6
DSFV 01500 F	130	C	168,1	1474,3	3,70 / 36,3	2,30 / 22,5
DSFV 02000 F	130	C	181,4	1951,9	4,80 / 47,0	3,00 / 29,4

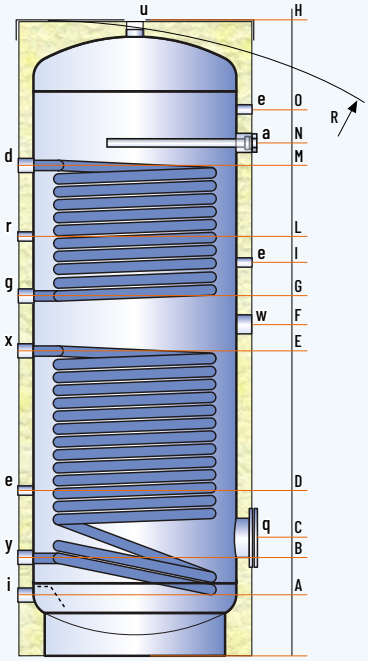
** Volume occupied by the heat exchanger and its support structure*

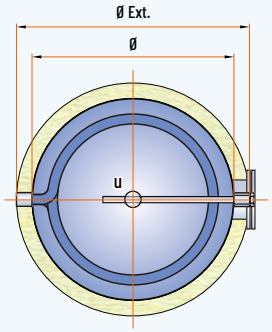
Dimensions and heights

SFV



DSFV





LEGEND

- **a .** Magnesium anode
- **d .** Boiler flow
- **e .** Thermometer - Sensor
- **g.** Boiler return
- **i .** Domestic cold water inlet
- **q .** DHW inspection hatch
- **r .** Recirculation
- **u .** Domestic hot water outlet
- **w.** Opening for immersion heater
- **x .** Solar system flow
- **y .** Solar system return

MODEL	DIMENSIONS (mm) Ø	H	Ø EXT ** (Hard/Soft ins.)	R *	LOWER HEAT EXCHANGER (m^2)	UPPER HEAT EXCHANGER (m^2)	WEIGHT SFV (kg)	WEIGHT DSFV (kg)
SFV 00150 R	450	1065	550	1210	0,85	-	54	-
_SFV 00200 R	450	1320	550	1440	0,90	0,50	64	70
_SFV 00300 R	500	1610	600	1730	1,30	0,85	83	93
_SFV 00400 R	650	1410	750	1610	1,60	0,90	98	109
_SFV 00500 R	650	1660	750	1835	1,95	1,10	112	125
SFV 00800	790	1750	990/1050	1745	2,70	1,50	177	195
SFV 01000	790	2100	990/1050	2095	3,00	1,90	206	229
SFV 01500	1000	2115	1200/1260	2145	3,70	2,30	323	351
SFV 02000	1100	2380	1300/1360	2465	4,80	3,00	452	488

** For capacities from 150 to 500 litres, the tilt height refers to the insulated cylinder*
*** The insulation is removable except for models from 150 to 500 litres*

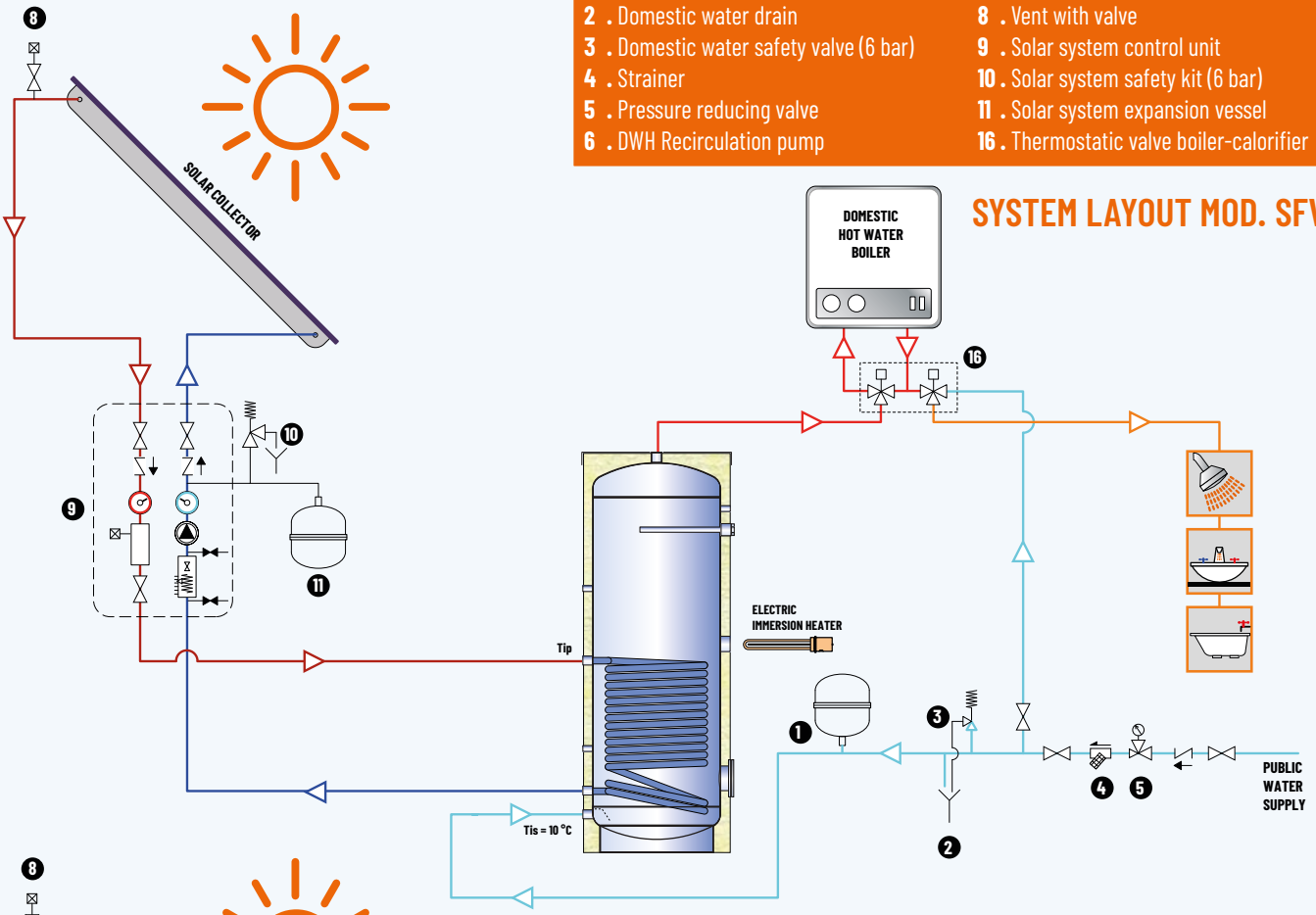
MODEL	HEIGHTS (mm) A	B	C	D	E	F	G	I	L	M	N	O	CONNECTIONS (GAS) a	d g x y	e	i	r	u	w	q
SFV 00150 R	110	190	260	300	530	560	-	-	730	-	730	840	1"¼	1"	½"	1"	½"	1"¼	1"½	120/180
_SFV 00200 R	110	190	260	340	630	690	740	850	840	950	980	1090	1"¼	1"	½"	1"	½"	1"¼	1"½	120/180
_SFV 00300 R	120	230	300	405	790	845	900	1050	1050	1200	1250	1365	1"¼	1"	½"	1"	½"	1"¼	1"½	120/180
_SFV 00400 R	145	240	310	375	690	745	800	900	900	1000	1030	1140	1"¼	1"	½"	1"	½"	1"¼	1"½	120/180
_SFV 00500 R	145	240	310	395	840	895	950	1095	1095	1250	1280	1390	1"¼	1"	½"	1"	½"	1"¼	1"½	120/180
SFV 00800	150	275	345	425	870	940	1010	1095	1200	1385	1250	1425	1"¼	1"	½"	1"½	1"	1"½	1"½	120/180
SFV 01000	150	275	345	430	1020	1090	1160	1280	1400	1635	1450	1770	1"¼	1"	½"	1"½	1"	1"½	1"½	120/180
SFV 01500	230	375	475	530	1110	1180	1250	1345	1460	1675	1490	1740	1"¼	1"	½"	2"	1"	2"	1"½	220/290
SFV 02000	255	385	540	540	1270	1340	1410	1545	1675	1935	1750	1955	1"¼	1"	½"	2"	1"	2"	1"½	220/290

Disclaimer: *this layout is purely indicative. It does not replace consultant's design*

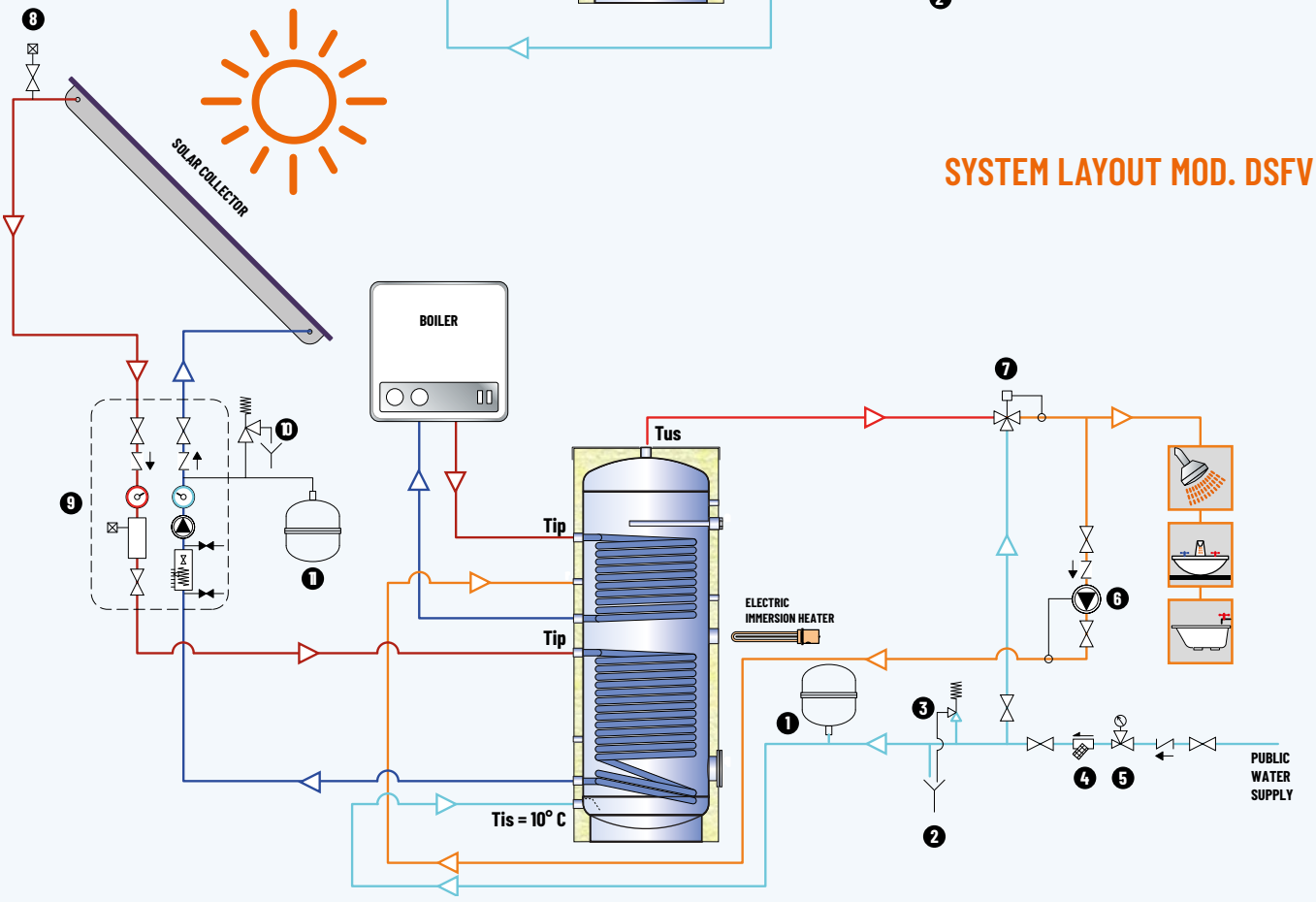
LEGEND

1 . Domestic water expansion vessel
2 . Domestic water drain
3 . Domestic water safety valve (6 bar)
4 . Strainer
5 . Pressure reducing valve
6 . DWH Recirculation pump
7 . DHW 3-way valve
8 . Vent with valve
9 . Solar system control unit
10 . Solar system safety kit (6 bar)
11 . Solar system expansion vessel
16 . Thermostatic valve boiler-calorifier

SYSTEM LAYOUT MOD. SFV



SYSTEM LAYOUT MOD. DSFV



Performance

Data related to the lower heat exchanger

	MODEL	SFV 00150R				_SFV 00200R				_SFV 00300R			
	HEAT EXCHANGER (m^2) [L] [1]	0,85 [6,0]				0,9 [6,4]				1,3 [9,2]			
	PRIMARY FLOW (m^3/h)	2				2				2			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') [2]	174	197	278	298	216	240	339	360	325	359	507	536
	LITRES FIRST HOUR [2]	341	481	665	784	392	539	747	872	572	775	1072	1244
	CONTINUOUS DRAW (L) [3]	211	358	489	614	222	378	515	646	312	526	714	895
	POWER (kW)	9	15	20	25	9	15	21	26	13	21	29	36
	PREHEATING [3] (min)	44	26	19	15	54	31	23	18	60	35	25	20
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') [2]	-	-	179	195	-	-	221	238	-	-	333	356
	LITRES FIRST HOUR [2]	-	-	372	468	-	-	424	525	-	-	617	756
	CONTINUOUS DRAW (L) [3]	-	-	243	344	-	-	257	363	-	-	359	506
	POWER (kW)	-	-	14	20	-	-	15	21	-	-	20,9	29,4
	PREHEATING [3] (min)	-	-	38	27	-	-	46	32	-	-	52	36
	NL [4]	1,4				2				5			

	MODEL	_SFV 00400R				_SFV 00500R				_SFV 00800_			
	HEAT EXCHANGER (m^2) [L] [1]	1,6 [11,3]				1,95 [13,8]				2,7 [19,2]			
	PRIMARY FLOW (m^3/h)	3				3				3			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') [2]	456	499	706	742	549	600	849	892	811	878	1241	1297
	LITRES FIRST HOUR [2]	765	1022	1418	1636	920	1224	1697	1954	1306	1704	2359	2694
	CONTINUOUS DRAW (L) [3]	391	661	900	1129	468	789	1071	1342	625	1044	1413	1765
	POWER (kW)	16	27	37	46	19	32	44	55	25	43	57	72
	PREHEATING [3] (min)	68	39	29	23	69	40	29	23	80	46	34	27
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') [2]	-	-	465	495	-	-	561	595	-	-	826	871
	LITRES FIRST HOUR [2]	-	-	822	998	-	-	987	1196	-	-	1394	1666
	CONTINUOUS DRAW (L) [3]	-	-	450	635	-	-	539	758	-	-	718	1004
	POWER (kW)	-	-	26	37	-	-	31	44	-	-	41,7	58,4
	PREHEATING [3] (min)	-	-	58	41	-	-	59	42	-	-	68	48
	NL [4]	8				11				20			

	MODEL	_SFV 01000_				_SFV 01500_				_SFV 02000_			
	HEAT EXCHANGER (m^2) [L] [1]	3,0 [21,3]				3,7 [26,3]				4,8 [34,1]			
	PRIMARY FLOW (m^3/h)	3				4				4			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') [2]	993	1065	1508	1568	1536	1626	2306	2382	2023	2133	3025	3117
	LITRES FIRST HOUR [2]	1535	1968	2727	3089	2211	2754	3831	4286	2867	3529	4902	5455
	CONTINUOUS DRAW (L) [3]	685	1140	1539	1921	853	1425	1926	2406	1066	1762	2372	2954
	POWER (kW)	28	46	63	78	35	58	78	98	43	72	97	120
	PREHEATING [3] (min)	91	53	39	31	115	67	49	38	126	73	53	42
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') [2]	-	-	1009	1059	-	-	1556	1618	-	-	2047	2123
	LITRES FIRST HOUR [2]	-	-	1631	1927	-	-	2331	2702	-	-	3013	3465
	CONTINUOUS DRAW (L) [3]	-	-	785	1097	-	-	980	1370	-	-	1220	1696
	POWER (kW)	-	-	46	64	-	-	57	80	-	-	70,9	98,6
	PREHEATING [3] (min)	-	-	79	55	-	-	99	69	-	-	108	76
	NL [4]	27				43				52			

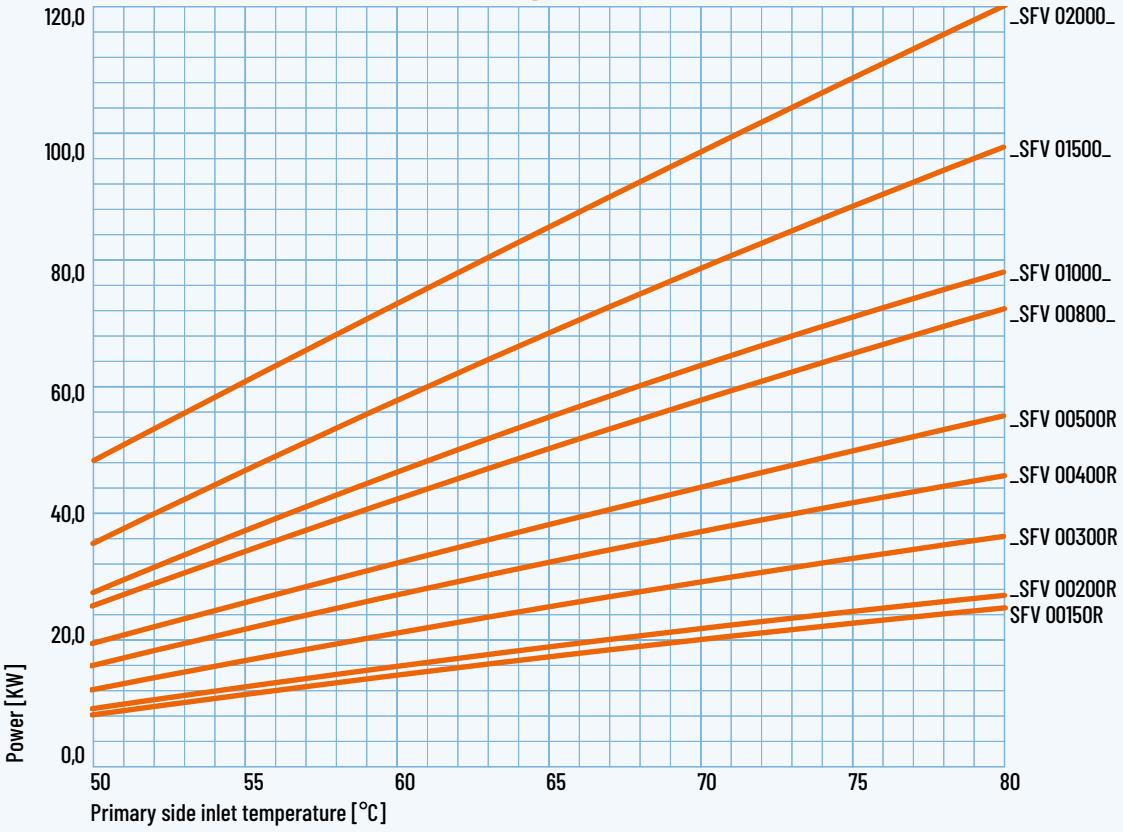
(1) Volume of fluid contained in the heat exchanger

(2) Obtainable with pre-heated cylinder (at 45 °C with primary side set at 50 or 60 °C and pre-heated at 60 °C in the other cases) and a running heat source

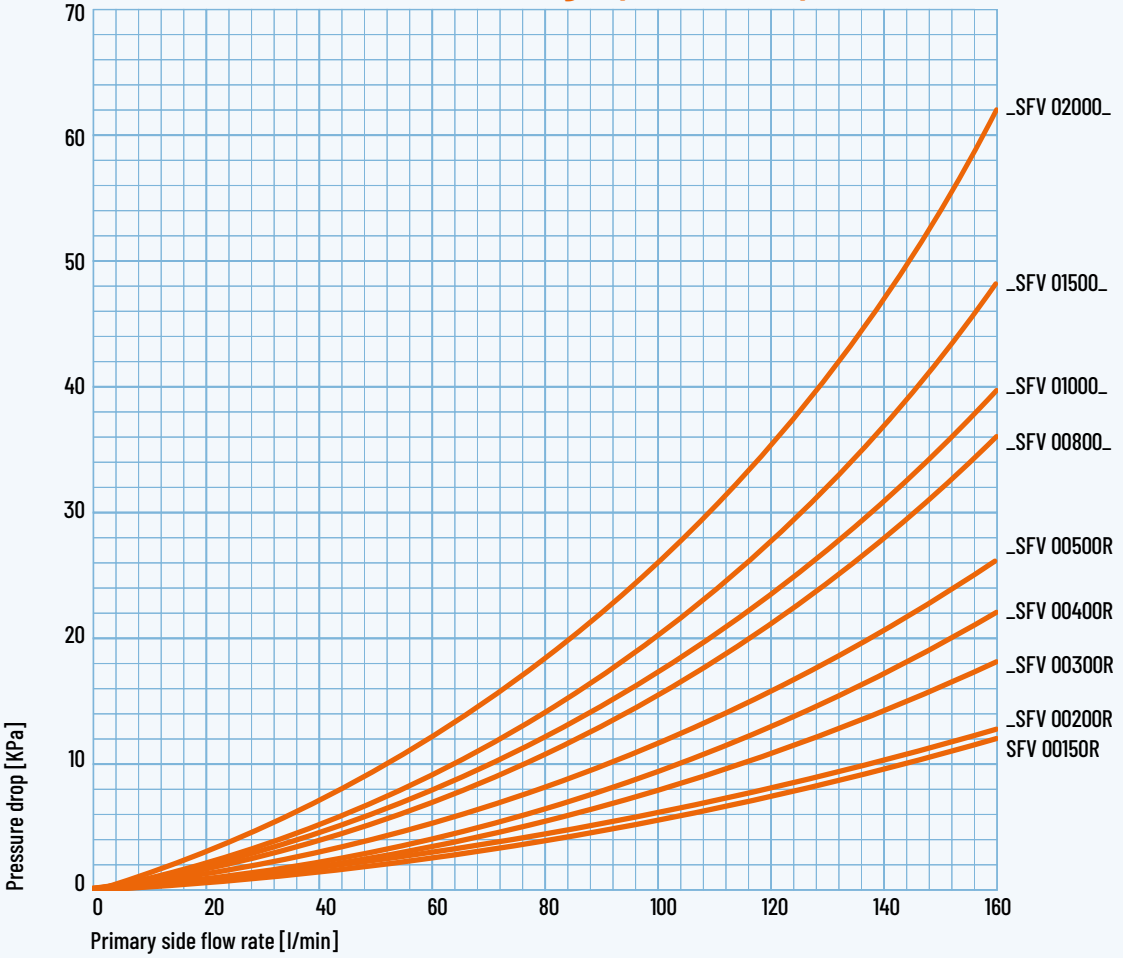
(3) With a proper power heat source generator

(4) Primary side 80 °C - Secondary side 10-45 °C

SFV & DSFV - **Lower heat exchanger** powers with secondary side at 10/45 °C



SFV & DSFV - **Lower heat exchanger** pressure drops



Data related to the upper heat exchanger

The performance values in the chart refer to the partial volume of water affected by the heat exchanger

	MODEL	DSFV 00200R				DSFV 00300R				DSFV 00400R				DSFV 00500R			
	HEAT EXCHANGER (m^2) [L] [1]	0,5 [3,5]				0,85 [6,0]				0,9 [6,4]				1,1 [7,8]			
	PRIMARY FLOW (m^3/h)	2				2				2				3			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') [2]	94	108	153	165	149	173	243	263	197	223	314	336	236	267	377	403
	LITRES FIRST HOUR [2]	195	281	389	462	316	456	630	749	377	530	735	865	454	638	883	1040
	CONTINUOUS DRAW (L) [3]	127	218	298	375	211	358	489	614	227	388	531	668	275	469	640	805
	POWER (kW)	5	9	12	15	9	15	20	25	9	16	22	27	11	19	26	33
	PREHEATING [3] (min)	38	22	16	13	36	21	15	12	46	27	19	15	46	27	19	15
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') [2]	-	-	97	107	-	-	155	171	-	-	203	220	-	-	243	264
	LITRES FIRST HOUR [2]	-	-	214	273	-	-	347	443	-	-	411	516	-	-	495	621
	CONTINUOUS DRAW (L) [3]	-	-	147	209	-	-	243	344	-	-	263	373	-	-	318	451
	POWER (kW)	-	-	8,6	12,2	-	-	14,2	20	-	-	15,3	21,7	-	-	18,5	26,2
	PREHEATING [3] (min)	-	-	32	23	-	-	31	22	-	-	40	28	-	-	40	28
	NL [4]	1				1				1				2			

	MODEL	DSFV 00800_				DSFV 01000_				DSFV 01500_				DSFV 02000_			
	HEAT EXCHANGER (m^2) [L] [1]	1,5 [10,6]				1,9 [13,5]				2,3 [16,3]				3,0 [21,3]			
	PRIMARY FLOW (m^3/h)	3				3				3				4			
	PRIMARY TEMP. (°C)	50	60	70	80	50	60	70	80	50	60	70	80	50	60	70	80
DHW FROM 10 TO 45 °C	LITRES 10' (L/10') [2]	336	376	531	565	441	491	693	735	625	684	966	1015	827	903	1276	1341
	LITRES FIRST HOUR [2]	627	870	1203	1409	803	1101	1522	1774	1055	1405	1944	2238	1388	1846	2556	2942
	CONTINUOUS DRAW (L) [3]	368	623	849	1066	457	771	1047	1312	543	911	1235	1545	710	1192	1616	2022
	POWER (kW)	15	25	35	43	19	31	43	53	22	37	50	63	29	49	66	82
	PREHEATING [3] (min)	50	29	21	17	55	32	23	18	68	40	29	23	69	40	29	23
DHW FROM 10 TO 60 °C	LITRES 10' (L/10') [2]	-	-	344	372	-	-	452	486	-	-	638	678	-	-	844	896
	LITRES FIRST HOUR [2]	-	-	680	847	-	-	869	1073	-	-	1132	1371	-	-	1490	1803
	CONTINUOUS DRAW (L) [3]	-	-	424	599	-	-	526	741	-	-	624	876	-	-	816	1146
	POWER (kW)	-	-	24,7	35	-	-	30,6	43,1	-	-	36,3	50,9	-	-	47,5	66,6
	PREHEATING [3] (min)	-	-	43	30	-	-	47	33	-	-	59	41	-	-	59	42
	NL [4]	3				3				6				10			

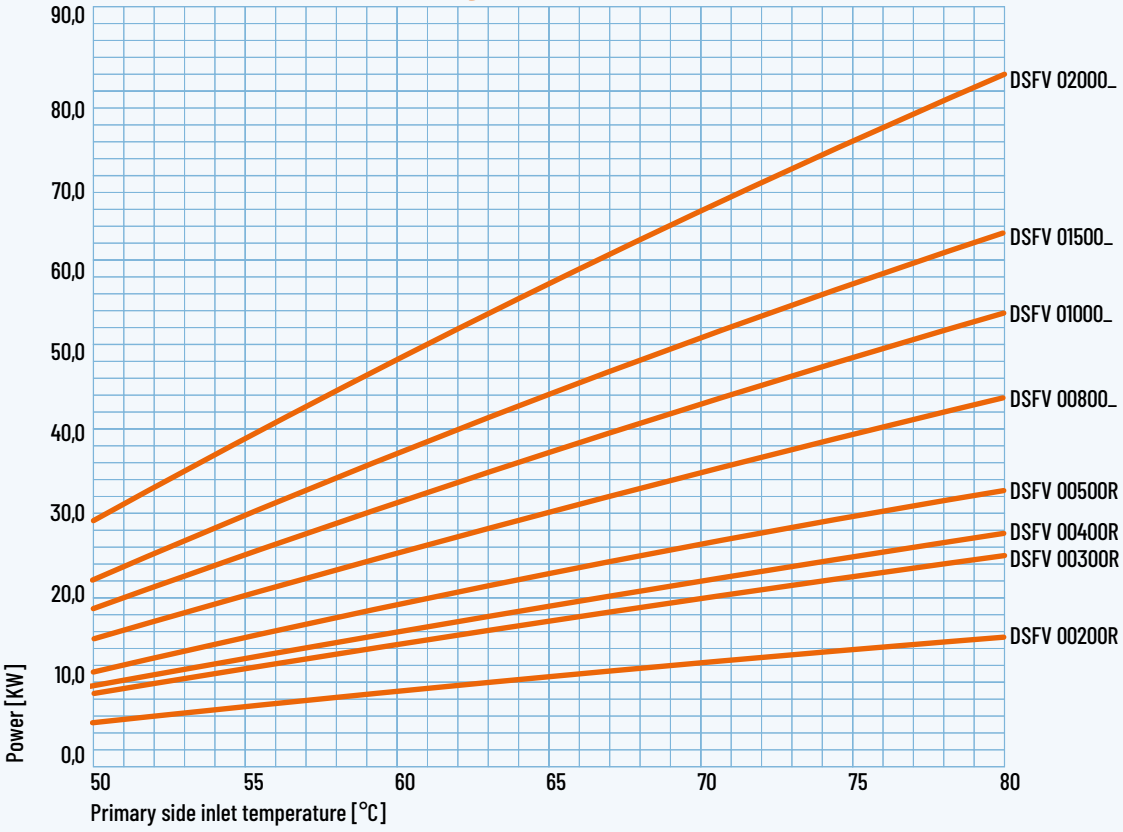
(1) Volume of fluid contained in the heat exchanger

(2) Obtainable with pre-heated cylinder (at 45 °C with primary side set at 50 or 60 °C and pre-heated at 60 °C in the other cases) and a running heat source

(3) With a proper power heat source generator

(4) Primary side 80 °C - Secondary side 10-45 °C

DSFV - **Upper heat exchanger** powers with secondary side at 10/45 °C



DSFV - **Upper heat exchanger** pressure drops