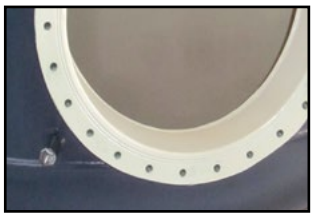
BV1VS - Enamelled boiler with PED steam exchanger
BV1KS - Keramtech boiler with PED steam exchanger

Boiler for the production and storage of Sanitary Hot Water. The boiler is made of carbon steel protected by internal enamelled/Keramtech processing. It is equipped with removable stainless steel AISI 316L tube bundle heat exchanger suitable to be powered with steam. The heat exchanger is equipped with a Declaration of Conformity PED (according to Annex VII of the European Directive 14/68/UE, and is bent downward to prevent bacterial growth in the coldest area in the boiler.



TECHNICAL CHARACTERISTICS

		BV1VS	BV1KS
Sanitary	Material:	S 235 Jr enamelled	S 235 Jr Keramtech
	Internal protective processing:	Inorganic alimentary enamelling DIN 4753.3	Alimentary epoxy- ceramic coating D.M. 174/04
	External protective processing:	Painting with anti rust and industrial enamel	Painting with anti rust and industrial enamel
	Operation (P max. / T max.):	8 bar / 95°C	6 bar / 100°C
	Cathodic protection:	Magnesium anode	Magnesium anode
Exchanger	Material:	Stainless steel AISI 316L on Inox plate	
	Internal protective processing:	Pickling and passivation	
	External protective processing:	Pickling and passivation	
	Typology:	U - tube bundle (steam-powered) on removable plate	
	Operation (P max. / T max.):	6 bar / 165°C o 12 bar / 191,7°C	
General characteristics	Capacity:	500 - 2000 Lt	2000 - 5000 Lt
	Warranty:	5 years (*sanitary storage*), 2 years (*removable exchanger*)	
	Insulation:	- Flexible Polyester + pvc: Fire *resistance class B2 (DIN4102)* - Rigid insulation: - up to 2000 Lt in polyurethane + pvc: *Fire resistance class B3 (DIN4102)* - from 2500 to 5000 Lt polyester (15) + polystyrene (85) + pvc: *Fire resistance class B2 (DIN4102)*	
	Reference legislation:	- PED 14/68/UE Art. 4 Par. 3 (Pressure equipment) - M.D. of 6th April 2004 N.174 (suitability of materials in contact with SHW) - Directive 2009/125/CE (Energy related Products)	

FITTINGS (pag. 152)

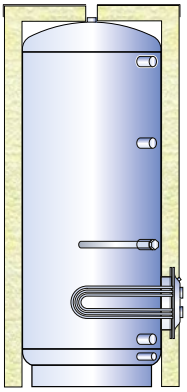
Electronic anode with impressed current

Electronic control unit

Electrical resistance 1"1/2 connection

Thermostat

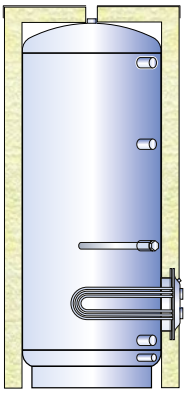
Thermometer



BV1VS6 - Enamelled boiler with inox AISI 316l removable tested PED steam 6 bar exchanger

Flexible polyester insul. 100 mm thick + pvc			Rigid Polyurethane insulation + pvc			
Code	ErP	€	Code	Thickness (mm)	ErP	€
	-	-	BV1VS6 00500 R	50	C	-
BV1VS6 00800 F	D	-	BV1VS6 00800 R	100	C	-
BV1VS6 01000 F	D	-	BV1VS6 01000 R	100	C	-
BV1VS6 01500 F	D	-	BV1VS6 01500 R	100	C	-
BV1VS6 02000 F	D	-	BV1VS6 02000 R	100	C	-

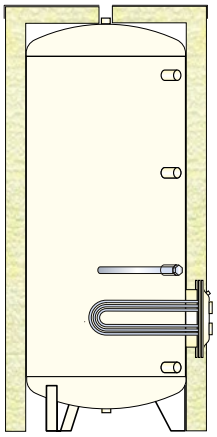
Request estimate for the horizontal version



BV1VS12 - Enamelled boiler with inox aisi 316L removable tested PED steam 12 bar exchanger

Flexible polyester insul. 100 mm thick + pvc			Rigid Polyurethane insulation + pvc			
Code	ErP	€	Code	Thickness (mm)	ErP	€
	-	-	BV1VS12 00500 R	50	C	-
BV1VS12 00800 F	D	-	BV1VS12 00800 R	100	C	-
BV1VS12 01000 F	D	-	BV1VS12 01000 R	100	C	-
BV1VS12 01500 F	D	-	BV1VS12 01500 R	100	C	-
BV1VS12 02000 F	D	-	BV1VS12 02000 R	100	C	-

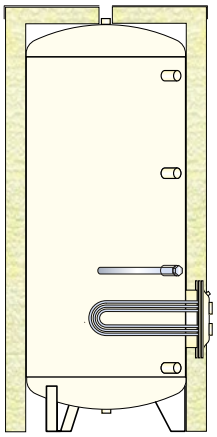
Request estimate for the horizontal version



BV1KS6 - Keramtech boiler with inox aisi 316L removable tested PED steam 6 bar exchanger

Flexible polyester insul. 100 mm thick + pvc			Rigid insulation + pvc			
Code	ErP	€	Code	Thickness (mm)	ErP	€
BV1KS6 02000 F	E	-	BV1KS6 02000 R	100	C	-
BV1KS6 02500 F	-	-	BV1KS6 02500 R	100	-	-
BV1KS6 03000 F	-	-	BV1KS6 03000 R	100	-	-
BV1KS6 04000 F	-	-	BV1KS6 04000 R	100	-	-
BV1KS6 05000 F	-	-	BV1KS6 05000 R	100	-	-
KDS (Exhaust kit)		-				

Horizontal version +10%

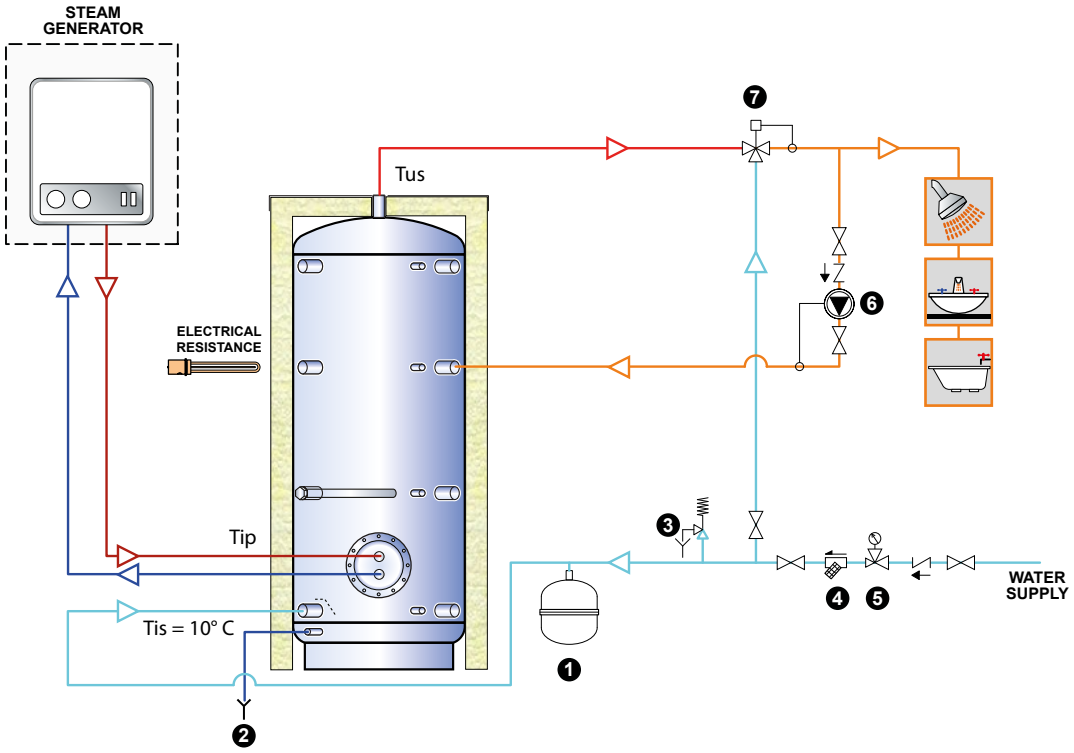


BV1KS12 - Keramtech boiler with inox aisi 316l removable tested PED steam 12 bar exchanger

Flexible polyester insul. 100 mm thick + pvc			Rigid insulation + pvc			
Code	ErP	€	Code	Thickness (mm)	ErP	€
BV1KS12 02000 F	E	-	BV1KS12 02000 R	100	C	-
BV1KS12 02500 F	-	-	BV1KS12 02500 R	100	-	-
BV1KS12 03000 F	-	-	BV1KS12 03000 R	100	-	-
BV1KS12 04000 F	-	-	BV1KS12 04000 R	100	-	-
BV1KS12 05000 F	-	-	BV1KS12 05000 R	100	-	-
KDS (Exhaust kit)		-				

Horizontal version +10%

Caution: *Indicative Schematic diagram, not substitutive for project work.*



LEGEND

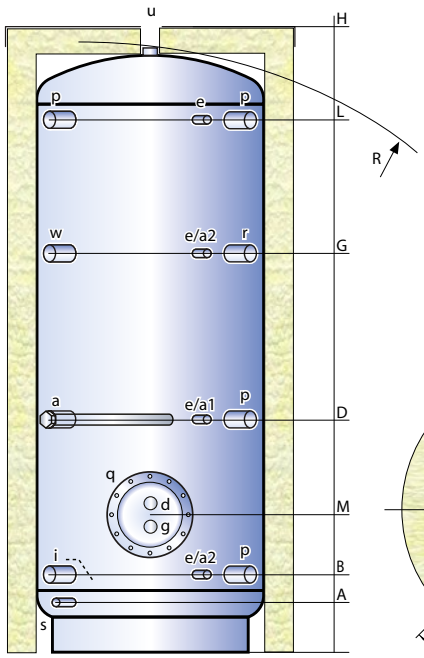
1. Sanitary expansion vessel
2. Sanitary drain
3. Sanitary safety valve (6 bar)
4. Dirt filter
5. Pressure reducer
6. Sanitary recirculation pump
7. Sanitary mixing valve

Model	steam tube bundle								Amount of water in the first ten minutes** (Lt/10 ')
	Sq.m. (Lt)	P=1 bar		P=3 bar		P=6 bar		P=12 bar		
		Tip=120,4°C		Tip=143°C		Tip=165°C		Tip=191,7°C		
		Power* (kW)	Flow* (Lt/h)	Power* (kW)	Flow* (Lt/h)	Power* (kW)	Flow* (Lt/h)	Power* (kW)	Flow* (Lt/h)	
BV1VS _00500R	1,0 (4,7)	89,8	2205	111,9	2751	133,5	3280	159,5	3920	985
BV1VS _00800_	1,5 (7,7)	133,3	3274	166,2	4083	198,1	4868	236,8	5818	1508
BV1VS _01000_	2,0 (9,5)	177,7	4366	221,6	5444	264,1	6490	315,7	7757	1866
BV1VS _01500_	3,0 (13,0)	266,5	6548	332,3	8166	396,2	9735	473,5	11635	2668
BV1_S _02000_	3,0 (13,0)	272,0	6684	339,3	8338	404,6	9943	483,7	11886	3211
BV1KS _02500_	3,0 (13,0)	272,0	6684	339,3	8338	404,6	9943	483,7	11886	3791
BV1KS _03000_	3,0 (13,0)	272,0	6684	339,3	8338	404,6	9943	483,7	11886	4320
BV1KS _04000_	4,0 (17,2)	355,3	8731	443,1	10888	528,3	12980	631,4	15513	5623
BV1KS _05000_	5,0 (20,8)	434,9	10685	542,1	13319	646,0	15874	772,0	18968	6786

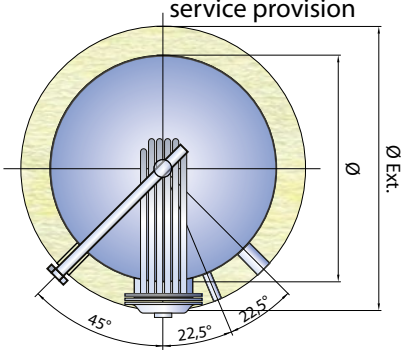
* Tus = 45°C
** Values calculated with an exchanger powered by 6 bar-steam.

For the purposes of the Directive (ErP) 2009/125/EC Regulation N° 812/2013 and N° 814/2013 the results of the energy measurements are given on page 218

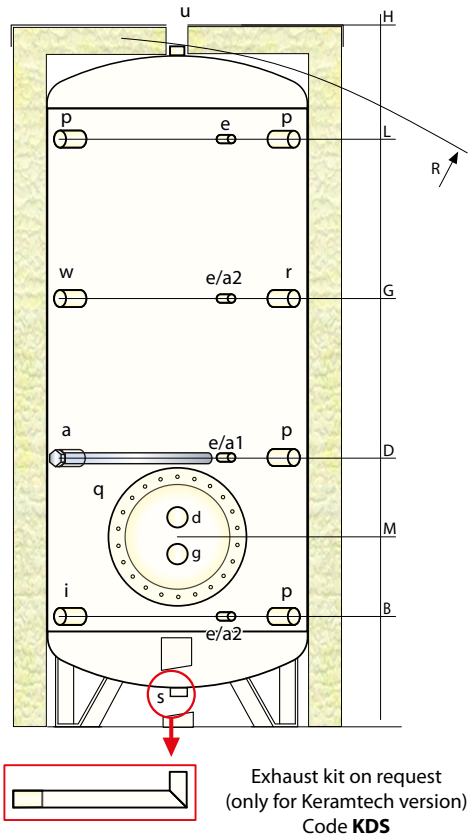
BV1VS



a	Magnesium anode
a1 - a2	provision for the electronic anode
d	boiler flow
e	Thermometer - sonda
g	boiler return
i	sanitary cold water inlet
p	service connection
q	exchanger flange
r	recirculation
s	exhaust
u	sanitary hot water output
w	electrical resistance
	service provision



BV1KS



Exhaust kit on request
(only for Keramtech version)
Code **KDS**

Model	Dimensions (mm) Ø	H	Ø Ext **	R*	Exchanger (Sq.m.)	Electronic anode (optional)	Weight (Kg)
BV1VS _00500R	650	1645	750	1820	1,00	a1 (EPS 375/125)	111
BV1VS _00800_	790	1750	990	1745	1,50	a1 (EPS 375/125)	188
BV1VS _01000_	790	2110	990	2095	2,00	a1 (EPS 375/125)	216
BV1VS _01500_	1000	2115	1200	2145	3,00	a2 (EPS 375/125)	330
BV1VS _02000_	1100	2435	1300	2465	3,00	a2 (EPS 375/125)	465
BV1KS _02000_	1100	2435	1300	2465	3,00	a2 (EPS 375/125)	303
BV1KS _02500_	1200	2595	1400	2640	3,00	a2 (EPS 700/200)	348
BV1KS _03000_	1250	2795	1450	2835	3,00	a2 (EPS 700/200)	388
BV1KS _04000_	1400	2925	1600	2995	4,00	a2 (EPS 700/200)	544
BV1KS _05000_	1600	2955	1800	3090	5,00	a2 (EPS 700/200)	649

* For capacities from 200 to 500 Lt diagonal of rollover refers to the insulated tank
** All insulations are removable except for models from 200 to 500 Lt

Model	Quotes (mm) A	B	D	G	L	M	Connections (gas) a p r	d g	e	i u	s	w	q
BV1VS _00500R	135	240	615	1105	1375	445	1"1/4	1"	1/2"	1"1/4	1"	1"1/2	220/290
BV1VS _00800_	150	275	655	1145	1410	450	1"1/4	2"	1/2"	1"1/2	1"	1"1/2	300/380
BV1VS _01000_	150	275	810	1355	1755	455	1"1/4	2"	1/2"	1"1/2	1"	1"1/2	300/380
BV1VS _01500_	235	340	765	1400	1725	520	1"1/4	2"	1/2"	2"	1"	1"1/2	300/380
BV1VS _02000_	265	370	930	1435	1945	575	1"1/4	2"	1/2"	2"	1"	1"1/2	350/430
BV1KS _02000_	-	475	1010	1515	1975	680	1"1/4	2"	1/2"	2"	1"1/4	1"1/2	400/480
BV1KS _02500_	-	505	1040	1600	2105	715	1"1/4	2"	1/2"	2"	1"1/4	1"1/2	400/480
BV1KS _03000_	-	515	1100	1730	2300	700	1"1/4	2"	1/2"	3"	1"1/4	1"1/2	400/480
BV1KS _04000_	-	595	1190	1815	2380	780	1"1/4	2"	1/2"	3"	1"1/4	1"1/2	400/480
BV1KS _05000_	-	600	1185	1815	2385	785	1"1/4	2"	1/2"	3"	1"1/4	1"1/2	400/480