

BLOWDOWN EXPANSION AND COOLING UNIT BEX

DESCRIPTION AND OPERATION

The ADCA BEX series blowdown expansion and cooling units are used in modern boiler houses to cool hot waste water and steam boiler blowdown before discharging them into a pit or drain. The waste water is discharged into the unit, which is at atmospheric pressure, and the cooling water enters through a control valve controlled by a thermostat, mixing it with the hot water.

If flash steam can not be recovered or discharged to atmosphere, an additional condensing water spray system (optional) can be supplied. It is fitted into the top of the unit and can be controlled directly, either by another thermostat, or by the same command used for the automatic blowdown valve control.

MAIN FEATURES

- Prevents thermal pollution.
- Overflow with siphon breaker.
- Easy to install.
- Reduces the flow of flash steam.

- OPTIONS:**
- Stainless steel construction.
 - Complete system including all the necessary equipment (stop and check valves, thermostats, exhaust head, etc).
 - Manifold with several inlets for multi-boiler installations.
 - Manhole or handhole for inspection.
 - Fitted with support brackets for elevated installation.

USE: Boiler blowdown and hot waste water.

AVAILABLE MODELS: BEX30, 40, 50, 60 and 80 – carbon steel.

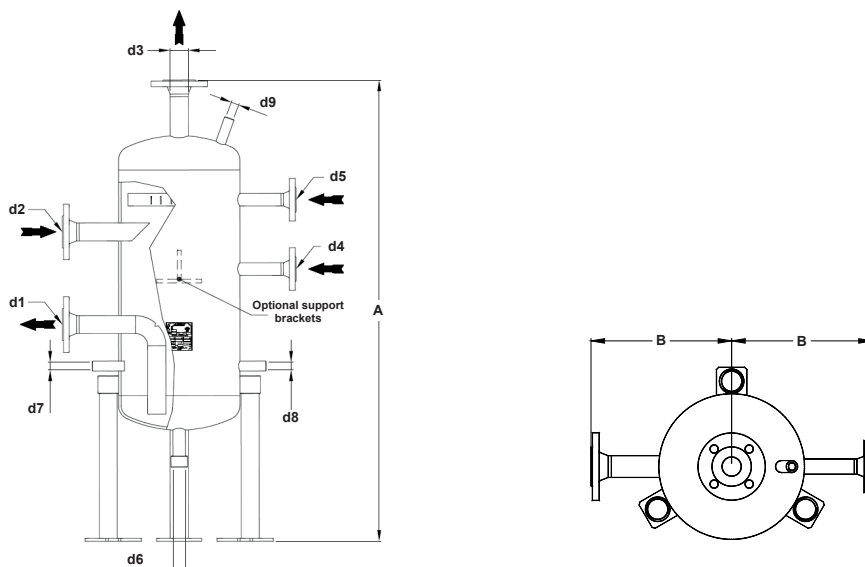
CONNECTIONS: Female threaded ISO 7 Rp or NPT.
Flanged EN 1092-1 PN 16.
Flanged ASME B16.5 Class 150.

INSTALLATION: Vertical installation.
The inlet of the blowdown tank is always higher than the boiler discharge valves. Therefore, the connecting pipe should have provisions made at a low point to drain the boiler.
See IMI – Installation and maintenance instructions.



LIMITING CONDITIONS	
PS – Maximum allowable pressure	0,5 bar
TS – Maximum allowable temperature	120 °C

Minimum operating temperature: - 10 °C.
Design code: AD-Merkblatt.
Other conditions and CE marking on request.



DIMENSIONS (mm) *

MODEL	A	B	d1	d2	d3	d4	d5 **	d6	d7	d8	d9 **	VOL. (L)	STW. (L) ***	WGT. (kg)
BEX30	1245	312	DN 40	DN 40	DN 40	DN 25	DN 25	1"	1/2"	1"	1"	66,6	18	69
BEX40	1275	355	DN 50	DN 50	DN 50	DN 25	DN 25	1"	1/2"	1"	1"	111,7	29	100
BEX50	1430	455	DN 80	DN 50	DN 80	DN 25	DN 25	1"	1/2"	1"	1"	251	71	130
BEX60	1930	455	DN 100	DN 65	DN 100	DN 25	DN 25	1"	1/2"	1"	1"	372	121	180
BEX80	2260	550	DN 150	DN 100	DN 150	DN 40	DN 40	1 1/2"	1/2"	1"	1"	883,5	233	367

* Indicative values. Final dimensions, weight and connections to be defined according to the supplied drawing.

** Optional.

*** Standing water.

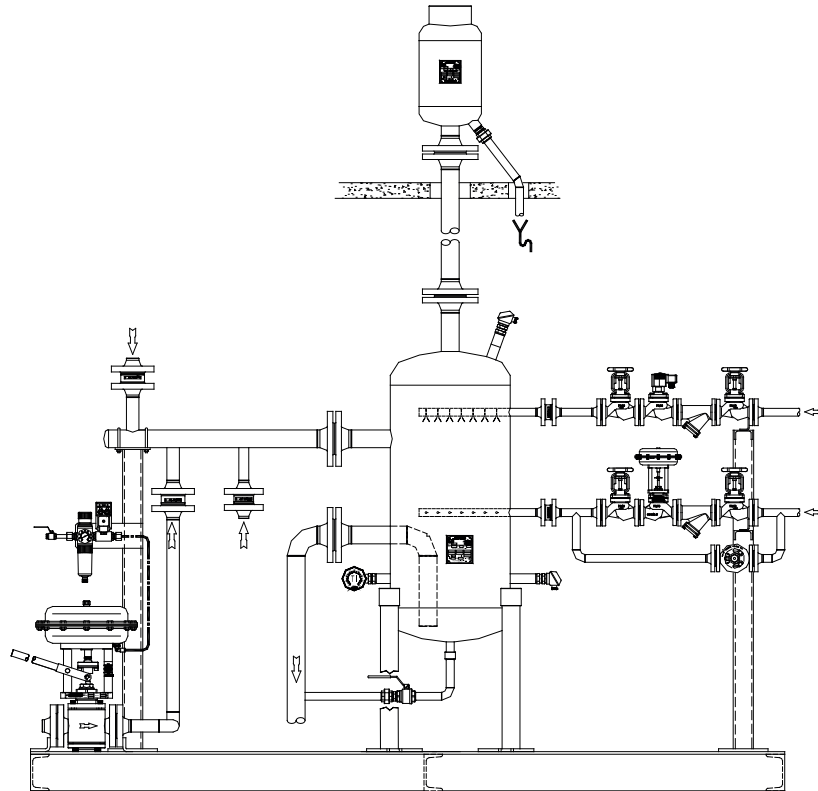
SELECTION TABLE

HOT WATER FLOW RATES (kg/h)	300	600	1500	3000	5000
MODEL	BEX30	BEX40	BEX50	BEX60	BEX80

CONNECTIONS

POS.	DESIGNATION	RATING
d1	Drain outlet	PN 16
d2	Blowdown outlet	PN 16
d3	Venting outlet	PN 16
d4	Cooling water inlet	PN 16
d5	Flash steam cooling water	PN 16
d6	Drain	PN 16
d7	Thermometer connection	PN 16
d8	Thermostat connection	PN 16
d9	Thermostat connection	PN 16

TYPICAL INSTALLATION



In case of order or inquiry, please refer the required item numbers (see assembly drawing ADBEX.01.2839).