

Bilge Water Separators with Disposal Membrane CPS B MKIII + EBM 14x



Facet bilge water separator is a device compact, adaptable to the small spaces available on board, lightweight and low maintenance.

Its operation is very easy and completely automatic, with all its functions controlled through a PLC.

The presence of emulsified oil in the bilge water of the latest generation vessels caused IMO to issue the resolution MEPC.107(49), which requires that the resulting effluent after bilge water treatment must contain levels below 15 ppm of surfactants.

This model combines the classic coalescing plates Facet MPak[®] with the disposal membranes which achieve a high efficiency in the breakdown of chemical and mechanical emulsions.

This combination allows that Facet CPS B MKIII + EBM 14x Separator meets the strict requirements of the aforementioned IMO regulation.

Results

Facet CPS B MKIII + EBM 14x eliminates hydrocarbons in two stages. In the first stage, free hydrocarbon is separated from water through Facet coalescing plates, while in the second stage emulsions are broken by a membrane which removes emulsified hydrocarbon, reaching down an effluent with total hydrocarbon content of less than 5 ppm.

Standard Design Features

- Flow rate range homologated: from 0.5 m³/h (2.2 USGPM) to 10 m³/h (44 usgpm)
- · Supplied ready to be installed
- No moving components other than pumps and pneumatic valves.
- Fixed control level, without float
- Very low maintenance, consisting in occasional hosing cleaning of the plates, and membrane replacement. No chemicals needed in both operations
- Water presence less than 5% in the separated oil, so it can be burned if required
- Power supply 380/440V, 50 or 60 Hz

Accessories

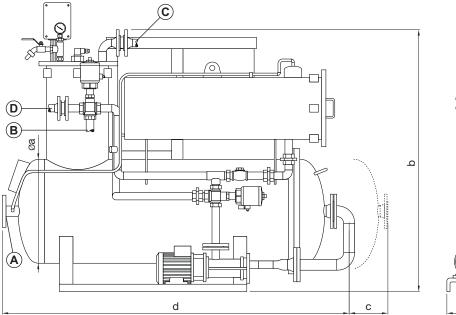
The equipment is supplied with the following accessories:

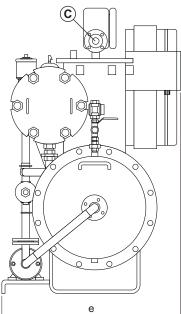
- Bilge alarm: as latest IMO MEPC. 107(49) resolution
- Electric heater in the oil dome to facilitate heavy oil discharge (if required)

Approvals

Facet CPS B MKIII + EBM 14x bilge water separators have been tested, approved and certified according to the requirements of IMO MEPC.107(49).

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	DIMENSIONS									FLOW		WEIGHT		WORKING			
MODEL	а		k	b				d		е		FLOW		WEIGHT		WEIGHT	
	in	mm	in	mm	in	mm	in	mm	in	mm	gpm	m³/h	lbs	kg	lbs	kg	
CPS 2.5B MKIII+EBM 14x1	181/ ₃₂	457	39¾	1000	10¾	275	33%	860	321⁄4	820	2.2	0.5	573	260	948	430	
CPS 5B MKIII+EBM 14x1	181/32	457	39%	1000	10¾	275	45	1145	331/2	850	4.4	1	617	280	1036	470	
CPS 10B MKIII+EBM 14x2	181/32	457	39¾	1000	3911/16	1010	69½	1755	321⁄4	820	11	2.5	915	415	1598	725	
CPS 25B MKIII+EBM 3 14x2	351/16	900	571/8	1450	29%	760	61½	1565	5111/16	1315	22	5	1620	735	3891	1765	
CPS 50B MKIII+EBM 3 14x3	351/16	900	61½	1550	29%	760	861/16	2185	51 ¹¹ / ₁₆	1315	44	10	1786	810	5357	2430	

MODEL	CONNECTIONS									
MODEL	A (Inlet)	B (Discharge to sea)	C (Oil Discharge)	D (Discharge to Bilge)						
CPS 2.5B MKIII+EBM 14x1	DN32 PN10/16	1⁄2" BSP	DN25 PN10	DN15 PN10						
CPS 5B MKIII+EBM 14x1	DN32 PN10/16	1" BSP	DN25 PN10	DN25 PN10						
CPS 10B MKIII+EBM 14x2	DN32 PN10/16	1" BSP	DN25 PN10	DN25 PN10						
CPS 25B MKIII+EBM 3 14x2	DN65 PN10/16	2" BSP	DN50 PN10	DN50 PN10						
CPS 50B MKIII+EBM 3 14x3	DN65 PN10/16	2" BSP	DN50 PN10	DN50 PN10						



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Pump

Level control Back to bilge line

Sample probe

Sample point

Heater (optional)

PPM alarm & sensor Facet MPak®

Overboard water outlet line Air line (customer supply)

EBM 14x Separator module

Electrical line (customer supply)

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