



TI-P404-01 AB Issue 5



Description

The M3 and M6 plate heat exchangers have been specifically selected for residual blowdown applications, having all wetted parts in 316 grade stainless steel. They are generally used as part of the Spirax Sarco boiler blowdown heat recovery system.

Principal features:

- Easily dismantled for cleaning without need for removing pipework.
- Clip-on EPDM gaskets.
- All wetted parts in 316 stainless steel.
- ALFA-LAVAL designed heat exchanger.
- High heat transfer efficiency.

Sizes and pipe connections

Screwed 1¹/₄" BSP (BS 21 male), 2" ISO R threads. **Note:** Heat exchangers can be supplied with flange connections to special order.

Materials

No.	Part	Material	
1	Plates	Stainless steel (316)	
2	Gasketing	EPDM	
3	Frame	Mild steel	
4	Connections	Stainless steel (316)	

Pressure/temperature limits

Note: The M3 and M6 heat exchangers comply with PED and are SEP products, except M6-33 which is a Category 1 product.

Maximum temperature	140°C
Maximum working pressure	10 bar g @ 140°C
Designed for a maximum cold hydraulic	test pressure of 13 bar g

Local regulations may restrict the use of this product to below the conditions quoted. In the interests of development and improvement of the product, we reserve the right to change the specification.

Dimensions/weights (approximate) in mm and kg

		•							Number	Weight	
Size	Α	В	С	D	E	F	G	L	of plates	Empty	Full of water
M3-8	480	180	357	60	62	1¼"	60	300	8	31	32
M3-10	480	180	357	60	62	1¼"	60	300	10	31	32
M3-21	480	180	357	60	62	1¼"	60	300	21	34	35
M3-31	480	180	357	60	62	1¼"	60	300	31	37	40
M6-12	920	320	640	140	140	2"	60	585	12	94	97
M6-15	920	320	640	140	140	2"	60	585	15	96	100
M6-19	920	320	640	140	140	2"	60	585	19	99	104
M6-21	920	320	640	140	140	2"	60	585	21	100	106
M6-25	920	320	640	140	140	2"	60	585	25	103	110
M6-33	920	320	640	140	140	2"	60	585	33	111	120



Sizing

When the heat exchanger is used as part of the Spirax Sarco boiler blowdown heat recovery system - refer to the appropriate literature. Otherwise:

Plate heat exchanger Type	Maximum blowdown capacity (kg/h)
M3-8	648
M3-10	860
M3-21	1 450
M3-31	2 160
M6-12	2 750
M6-15	4 900
M6-19	5915
M6-21	7 110
M6-25	8 0 4 0
M6-33	11 000

Safety information, installation and maintenance

This document does not contain enough information to install the product/system safely. For full details see the Installation and Maintenance Instructions supplied with the product.

Installation notes:

The preferred method of installation is to bolt the heat exchanger rigidly to the floor, in a vertical position. We recommend the use of a swan neck on the primary outlet (S2) to ensure the heat exchanger does not dry out - this can otherwise cause problems with debris and can damage the gaskets.

Maintenance note:

An annual inspection is recommended to check for leaking gaskets and the build up of scale and sludge.

Spare parts

Spare plates with integral gaskets are available from Spirax Sarco.

How to order

 $\mbox{Example: 1 off M6-23 plate heat exchanger having 2" screwed ISO R connections.$