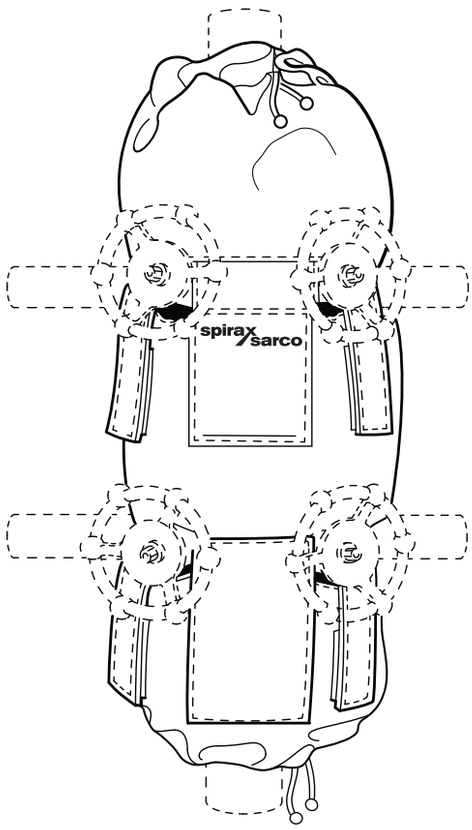
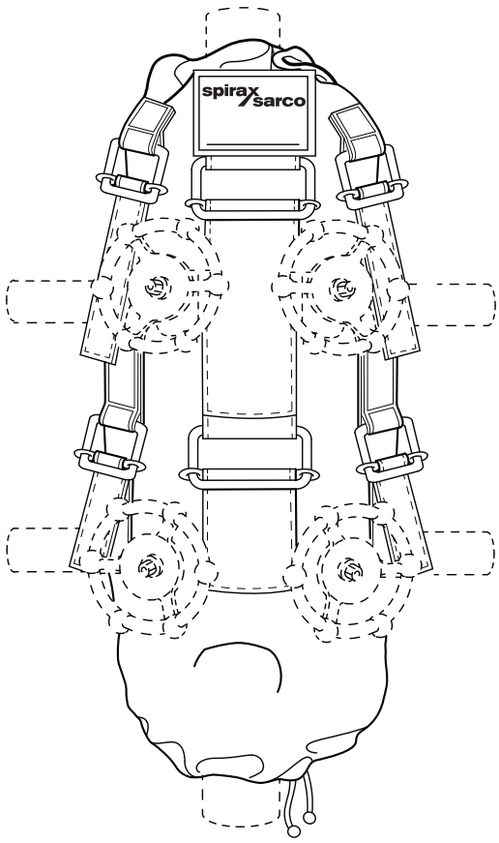
TI-P117-10
CMGT Issue 7

IJ-MSC and IJ-MSC-H Insulation Jackets for MSC Manifolds



IJ-MSC04 shown fitted to MSC04



IJ-MSC04-H shown fitted to MSC04

Description

A range of insulation jackets for fitting to manifolds type MSC. Two versions are available: a low temperature version designated IJ-MSC and a high temperature version designated IJ-MSC-H. TI-P117-11 gives details of a payback calculator based on the energy saving to be made by fitting an insulation jacket.

Available types

Available in low temperature version (with velcro fastening) and high temperature version (with strap/buckle fastening) one piece jackets for fitting to all sizes of manifold.
IJ-MSC04 and **IJ-MSC04-H** for insulating an MSC04 manifold
IJ-MSC08 and **IJ-MSC08-H** for insulating an MSC08 manifold
IJ-MSC12 and **IJ-MSC12-H** for insulating an MSC12 manifold

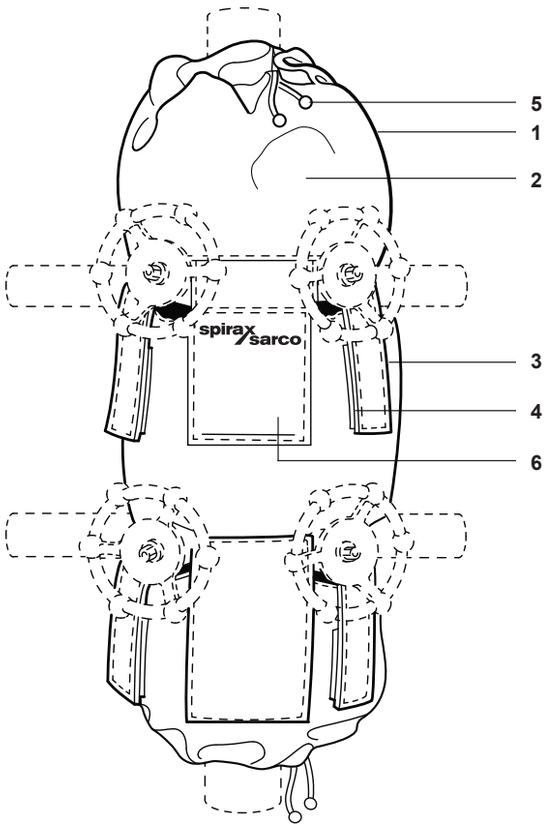
Limiting conditions

Maximum metal surface temperature	**IJ-MSC**	220 °C
	IJ-MSC-H	425 °C
Thermal conductivity		0.044 W/m K at 100 °C

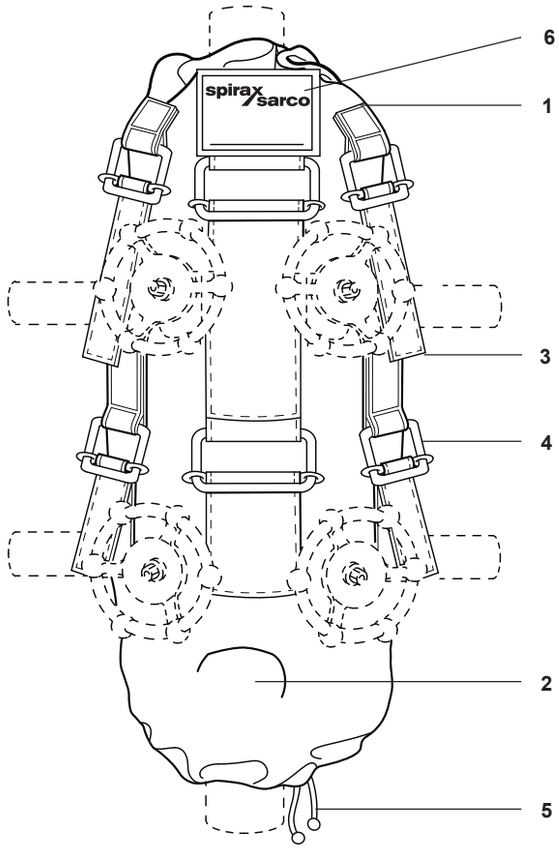
Steam traps

Manifolds and insulation jackets

Materials



IJ-MSC04 shown fitted to MSC04



IJ-MSC04-H shown fitted to MSC04

No.	Part		Material
1	Inner and outer face	**IJ-MSC**	Silicone rubber coated glass fibre
		IJ-MSC-H	Glass fibre
2	Insulation	**IJ-MSC**	Mineral fibre
		IJ-MSC-H	Mineral fibre
3	Stitching	**IJ-MSC**	Polyester cotton
		IJ-MSC-H	Kevlar cotton
4	Sealing	**IJ-MSC**	Velcro
		IJ-MSC-H	Glass fibre/stainless steel buckles
5	Drawcords	**IJ-MSC**	Nylon
		IJ-MSC-H	Kevlar
6	Label		Nylon

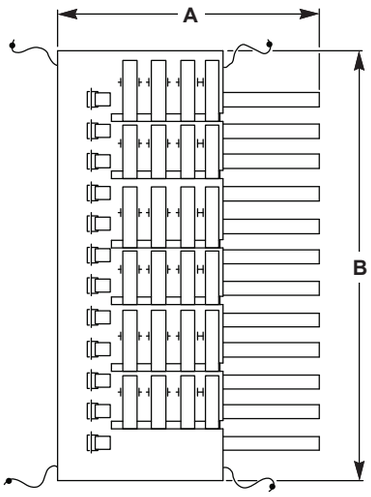
How to order

Example: 1 off IJ-MSC08 insulation jacket to fit an MSC08 manifold.

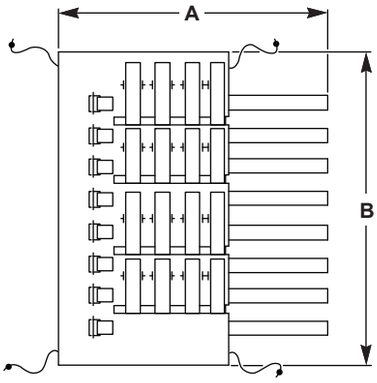
Polígono Industrial O Rebullón s/n. 36416 - Mos - España - rodavigo@rodavigo.com

Dimensions/mass (approximate) in mm and kg (The diagrams below show the unfolded dimensions of the jackets)

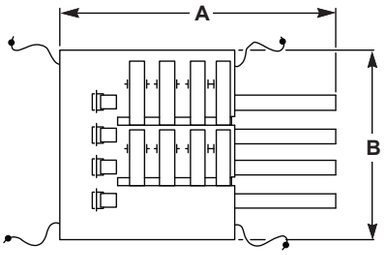
IJ-MSC-H



to suit MSC12



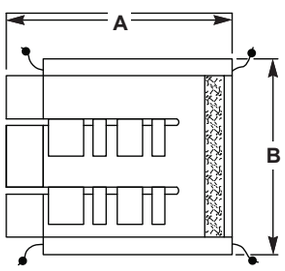
to suit MSC08



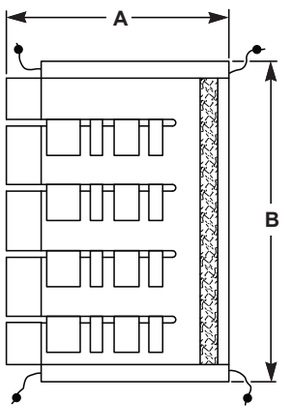
to suit MSC04

IJ-MSC	A	B	Insulation thickness	Mass
IJ-MSC04	615	560	50	1.34
IJ-MSC08	615	940	50	2.04
IJ-MSC12	615	1320	50	2.74

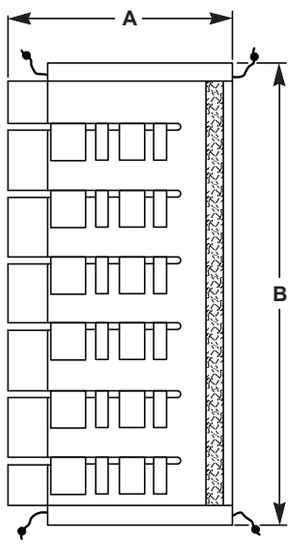
IJ-MSC



to suit MSC04



to suit MSC08



to suit MSC12

IJ-MSC-H	A	B	Insulation thickness	Mass
IJ-MSC04-H	835	590	50	2
IJ-MSC08-H	835	960	50	3
IJ-MSC12-H	835	1330	50	4

Installation

Once the manifold has been installed, the jacket can be fitted. The jacket is a one piece construction and there is no need to remove any pipework or handwheels to fit it. The jacket can be fitted quickly and easily by following this procedure.

IJ-MSC

Place jacket on the right hand side of manifold up to mounting studs so that continuous velcro strip is on outside face of jacket. Wrap jacket around uppermost pair of valves by passing flaps between pipework and valve bonnets/handwheels. Pass horizontal uninsulated velcro flap behind manifold and fasten on continuous strip on the other side. Now position and fix large flap between each pair of valves. Adjust any flaps as necessary. The label should be positioned between the uppermost pair of valves and all vertical flaps should point downwards. Finally the upper and lower drawcords should be pulled tightly around the DN40 pipes to close any air gaps. When fitted the jacket should be a tight fit. The flaps and drawcords should be fitted tightly to minimise any gaps that would allow air to flow through or allow the ingress of water.

IJ-MSC-H

Place jacket on the left hand side of the manifold up to mounting studs so that the buckles on are on the outside face of the jacket. Wrap jacket around uppermost pair of valves by passing flaps between pipework and valve bonnets/handwheels. Pass strap behind manifold and through buckle on other side. Now position and fix large flap as necessary. The label should be positioned between the uppermost pair of valves and all straps should point downwards after fastening. Finally the upper and lower drawcords should be pulled tightly around the DN40 pipes to close any air gaps. When fitted the jacket should be a tight fit. The straps and drawcords should be fitted tightly to minimise any gaps that would allow air to flow through or allow the ingress of water. However, be careful when pulling straps tight that you do not inadvertently open up gaps in other places.

Important note: Both the inner/outer face and insulation are made with a bonded aluminium foil. At a temperature of 120 °C the adhesive bonding the aluminium will start to degrade and delamination of the foil will occur at 150-170 °C. Scorching of the internal fabric may occur at 150 °C. Neither of these reactions will impair the performance.

Removal

Before removing the jacket, check if the manifold is in service. If it is, then the metal surface will be hot enough to burn and suitable protective clothing (e.g. gloves) should be worn. If it is necessary to access any valve, then the whole jacket does not need to be removed.

Handling

When the jacket is new, the insulation material is fully enclosed within the inner and outer face and retained by the stitching. In this condition for handling no special protective clothing is required. However, if the inner and outer faces become unstitched or damaged so as to expose the insulation material then suitable protective clothing (e.g. gloves, safety glasses, face mask and overalls) should be worn.

Disposal

This product is not recyclable and non-combustible. For disposal purposes consider the product to be mineral fibre and dispose of in accordance with local regulations.