

WALRAVEN



WM BISOFIX® COLDBLOCKS WITH PIPE CLAMP



FOR A VAPOUR SEALED PIPE FIXING

- set consisting of an insulation shell and a pipe clamp
- for pipes of steel, stainless steel, copper or plastic from 15 up to 406,4 mm
- available in insulation thickness 20, 30, 40 and 50 mm
- excellent thermal and mechanical properties
- simple to apply
- efficient and reliable



Pipe insulation

According to current regulations, cooling water, cold water, warm water and heating pipes have to be insulated to prevent loss of energy and condensation.

The actual point of the pipe fixing should also be insulated. Care should be taken so that:

- the weight of the pipe does not crush the insulation, thus reducing its thermal properties.
- the insulation materials should have a vapour barrier seal in between the lengths of insulation.

Why *WM* Bisofix® Coldblocks with Pipe Clamps?

- A set consists of a steel pipe clamp with insulation shell having a moisture proof outer covering of aluminium foil;
- It prevents condensation at the point of the pipe fixing;
- A hard foam Insulation shell of PIR prevents the insulation material from crushing under the weight of the pipe;
- Excellent thermal and mechanical properties;
- The two-part insulation shell is simple to fix on the pipe;
- Aluminium foil with overlap for a perfect seal of the insulation shell;
- The insulation shell is always 50 mm minimum longer than the width of the pipe clamp or the length of the support sleeve. This allows enough space to form a vapour barrier seal between the insulation shell and the pipe insulation.;
- Aluminium foil with glass-fibre reinforcement for protection against external impact;
- Dimensions and density of the insulation shell are calculated to the weight of the pipe;
- Available for all standard pipe dimensions from 15 up to 406,4 mm.



WM BISOFIX® Coldblock

Assembly:



Check the dimensions of the insulation shell, peel back the overlap of the aluminium foil and assemble the unit around the pipe.



Close the insulation shell and put back the overlap.



Push the unit to the desired position.



Fix the pipe with threaded rod and the clamp provided. Place the pipe insulation on the pipe and make a vapour proof seal between the insulation shell and the pipe with aluminium tape.



Support sleeves for *WM* Bisofix® Coldblocks

For bigger pipe dimensions or wider fixing distances, we advise the use of support sleeves to spread the weight of the pipe. Support sleeves for *WM* Coldblocks are available in 2 lengths.

Length of the support sleeve	for pipe Ø
100 mm	> 273 mm
150 mm	> 406 mm

2 Support sleeves per fixing are recommended.

A horizontal pipe can also be fixed with the help of a Clevis Hanger and one support sleeve.

Material:

Polyisocyanurate (PIR) is related to polyurethane and is a thermally hardening foam with closed cells. PIR has a better insulation value and a slightly better fire resistance in comparison with PUR. Other advantages of PIR insulation are high compression strength and thermal stability.

PIR does not permit burning material to drip during a fire. A carbon layer is formed giving extra protection against further burning. The glass-fibre reinforced aluminium foil is extra fire-retardant.

PIR is free of CFK's, does not smell and is resistant to fungus. It also withstands a large diversity of chemicals and solvents.

Physical properties:	Up to 108,0 mm	Up to 609,6 mm	Test method
Density	80 kg/m ³	120 kg/m ³	BS 4370 ASTM D 1622
Thermal conductivity (at 10°C)	0,027 W/mK	0,031 W/mK	BS 4370 ASTM C 177 DIN 52612
Compressive strength (at 10% compression)	0,84N/mm ²	1,4N/mm ²	BS 4370 ASTM D 1621
Water vapour permeability	15µg _m /Nh > 7000µ	15µg _m /Nh > 7000µ	BS 4370 ASTM E 96 DIN 52615
Min. operating temperature	-180°C	-180°C	
Max. operating temperature	+140°C	+140°C	
Fire class	B2	B2	DIN 4102
Percentage closed cells	90%	90%	BS 4370 ASTM D 2826



Support sleeves



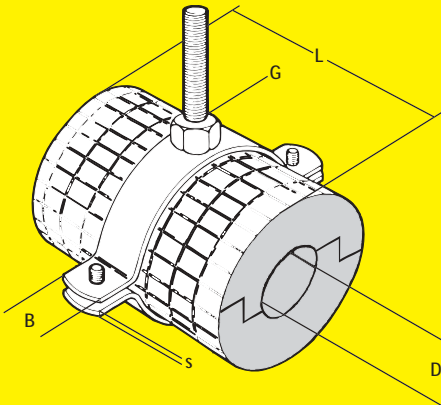
WM Bisofix® Coldblock with pipe clamp and support sleeves.



WM Bisofix® Coldblock with support sleeve and Clevis Hanger



WM Bisofix® Coldblock with Pipe Clamp



D (mm)	L (mm)	Density (Kg/m3)	Insulation-thickness 20 mm	B x s (mm)	G (Ø)	Insulation - thickness 30 mm	B x s (mm)	G (Ø)
15,0-16,0	75	80	221 2 015	20 x 1,5	M8/M10	221 3 015	20 x 2,0	M8/M10
17,2-18,0	75	80	221 2 017	20 x 1,5	M8/M10	221 3 017	20 x 2,0	M8/M10
21,3-22,0	75	80	221 2 021	20 x 1,5	M8/M10	221 3 021	23 x 1,5	M8/M10
26,9-28,0	75	80	221 2 027	20 x 2,0	M8/M10	221 3 027	23 x 1,5	M8/M10
33,7-35,0	75	80	221 2 033	20 x 2,0	M8/M10	221 3 033	23 x 1,5	M8/M10
42,0-42,4	75	80	221 2 042	23 x 1,5	M8/M10	221 3 042	23 x 1,5	M8/M10
48,0-48,3	75	80	221 2 048	23 x 1,5	M8/M10	221 3 048	23 x 1,5	M8/M10
54,0	75	80	221 2 054	23 x 1,5	M8/M10	221 3 054	23 x 1,5	M8/M10
57,0	75	80	221 2 057	23 x 1,5	M8/M10	221 3 057	23 x 1,5	M8/M10
60,3	75	80	221 2 060	23 x 1,5	M8/M10	221 3 060	23 x 2,0	M8/M10
63,5-64,0	75	80	221 2 064	23 x 1,5	M8/M10	221 3 064	23 x 2,0	M8/M10
70,0	75	80	221 2 070	23 x 2,0	M8/M10	221 3 070	23 x 2,0	M8/M10
76,0-76,1	75	80	221 2 076	23 x 2,0	M8/M10	221 3 076	23 x 2,0	M8/M10
88,9	75	80	221 2 089	23 x 2,0	M8/M10	221 3 089	23 x 2,0	M8/M10
108,0	75	80	221 2 108	23 x 2,0	M8/M10	221 3 108	23 x 2,0	M8/M10
114,3	100	120	221 2 114	23 x 2,0	M8/M10	221 3 114	25 x 3,0	M8/M10
133,0	100	120	221 2 133	25 x 3,0	M8/M10	221 3 133	25 x 3,0	M8/M10
139,7	100	120	221 2 140	25 x 3,0	M8/M10	221 3 140	25 x 3,0	M8/M10
159-160,0	100	120	-	-	-	221 3 159	25 x 3,0	M8/M10
168,3	100	120	-	-	-	221 3 168	38 x 4,0	M10/M12
219,1	150	120	-	-	-	221 3 219	38 x 4,0	M10/M12
273,1	150	120	-	-	-	221 3 273	38 x 4,0	M10/M12
323,9	150	120	-	-	-	221 3 324	48 x 5,0	M16
			Insulation-thickness 40mm			Insulation - thickness 50mm		
33,7-35,0	75	80	221 4 033	23 x 2,0	M8/M10	221 5 033	23 x 2,0	M8/M10
42,0-42,4	75	80	221 4 042	23 x 2,0	M8/M10	221 5 042	23 x 2,0	M8/M10
48,0-48,3	75	80	221 4 048	23 x 2,0	M8/M10	221 5 048	23 x 2,0	M8/M10
54,0	75	80	221 4 054	23 x 2,0	M8/M10	221 5 054	23 x 2,0	M8/M10
57,0	75	80	221 4 057	23 x 2,0	M8/M10	221 5 057	23 x 2,0	M8/M10
60,3	75	80	221 4 060	23 x 2,0	M8/M10	221 5 060	23 x 2,0	M8/M10
63,5-64,0	75	80	221 4 064	23 x 2,0	M8/M10	221 5 064	23 x 2,0	M8/M10
70,0	75	80	221 4 070	23 x 2,0	M8/M10	221 5 070	25 x 3,0	M8/M10
76,0-76,1	75	80	221 4 076	23 x 2,0	M8/M10	221 5 076	25 x 3,0	M8/M10
88,9	75	80	221 4 089	23 x 2,0	M8/M10	221 5 089	25 x 3,0	M8/M10
108,0	75	80	221 4 108	25 x 3,0	M8/M10	221 5 108	25 x 3,0	M8/M10
114,3	100	120	221 4 114	25 x 3,0	M8/M10	221 5 114	25 x 3,0	M8/M10
133,0	100	120	221 4 133	25 x 3,0	M8/M10	221 5 133	38 x 4,0	M10/M12
139,7	100	120	221 4 140	25 x 3,0	M8/M10	221 5 140	38 x 4,0	M10/M12
159-160,0	100	120	221 4 159	38 x 4,0	M10/M12	221 5 159	38 x 4,0	M10/M12
168,3	100	120	221 4 168	38 x 4,0	M10/M12	221 5 168	38 x 4,0	M10/M12
219,1	150	120	221 4 219	38 x 4,0	M10/M12	221 5 219	38 x 4,0	M10/M12
273,1	150	120	221 4 273	48 x 5,0	M16	221 5 273	48 x 5,0	M16
323,9	150	120	221 4 324	48 x 5,0	M16	221 5 324	48 x 5,0	M16
406,4	200	120	221 4 406	48 x 5,0	M16	221 5 406	48 x 5,0	M16

* Other dimensions on demand

<p>Nederland:</p> <p>Walraven B.V. Postbus 15 NL-3640 AA MIJDRECHT Tel. +31 (0)297 23 30 00 Fax +31 (0)297 23 30 33 info@walraven.com</p>	<p>België/Belgique:</p> <p>Walraven BVBA Ambachtenlaan 30 B-3300 TIENEN Tel. +32 (0)16 82 20 40 Fax +32 (0)16 82 01 86 info@walraven.be</p>
<p>Deutschland:</p> <p>BIS Walraven GmbH Postfach 125128 D-95425 BAYREUTH Tel. +49 (0)921 7560 0 Fax +49 (0)921 7560 222 info@bis-walraven.de</p>	<p>France:</p> <p>Walraven SARL 2, Allée du Moulin Berger F-69130 ECULLY Tel. +33 (0)4 78 66 15 10 Fax +33 (0)4 78 64 55 89 info@walraven.fr</p>
<p>United Kingdom:</p> <p>IHL Walraven Ltd. Thorpe Close, BANBURY Oxon, UK-OX16 8UU Tel. +44 (0)1295 75 34 00 Fax +44 (0)1295 75 34 28 sales@walraven.co.uk</p>	<p>Česká Republika:</p> <p>Walraven IS s.r.o. Bezděčín 17 CZ-29301 MLADÁ BOLESLAV Tel. +420 326 72 40 09 Fax +420 326 72 40 09 info@walraven.is.cz</p>
<p>Polska:</p> <p>Walraven Sp Z.O.O. UL. Zakopłanska 85 PL-30 418 KRAKÓW Tel. +48 (0)12 268 42 61 Fax +48 (0)12 268 42 60 info@walraven.pl</p>	<p>Other countries:</p> <p>Walraven International B.V Postbus 15 NL-3640 AA MIJDRECHT Tel. +31 (0)297 23 30 00 Fax +31 (0)297 28 64 09 export@walraven.com</p>

Support sleeves for *WM* Bisofix® Coldblocks

D (mm)	L (mm)	Insulation-thickness 30 mm	Insulation - thickness 40 mm	Insulation - thickness 50 mm
273,1	100	2340100333	2340100353	2340100373
323,9	100	2340100384	2340100404	2340100424
406,4	150	-	2340150486	2340150507