

GAME CHANGING *kairopak* SYSTEM

Proven Kaiflex technology,
new beneficial length: 1,20 m



kaiflex[®] **HF** plus s2

Halogen-free complete solution for reliable fire and corrosion protection

- Halogen-free insulation system – including all components
- Ideal solution for buildings, industrial and specialist applications
- Classified as s2, it complies with the exacting European smoke specifications
- Free of PVC, chlorides and brominated flame retardants
- Safe to use in sustainable buildings



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Kaiflex HFplus s2 Technical Data

Material		Elastomeric foam based on synthetic rubber. Flexible Elastomeric Foam (FEF) in acc. to EN 14304	
Cell structure		Closed cell	
Colour		Black / Anthracite	
Upper temperature limit	Pipe Flat surfaces	+110 °C +85 °C	
Lower temperature limit		-40 °C	See remark (1)
Thermal conductivity	λ_{10} at -10 °C at 0 °C at +10 °C	$0,040 + 8,0 \cdot 10^{-5} \vartheta + 7,0 \cdot 10^{-7} \vartheta^2$ $\leq 0,039$ W/(m·K) $\leq 0,040$ W/(m·K) $\leq 0,041$ W/(m·K)	Test acc. to DIN EN ISO 8497 DIN EN 12667
Water vapour permeability	Moisture resistance factor μ	≥ 2.000	Test acc. to DIN EN 12086 DIN EN 13469
Euroclass °	Tubes Sheets	D ₁ -s2, d0 (corresponds to RF3 in acc. with VKF Fire protection guidelines) D-s2, d0 (corresponds to RF3 in acc. with VKF Fire protection guidelines)	Test acc. to DIN EN 13501-1
Practical fire behaviour		Self-extinguishing, no drips, does not support flame spread	
Environmental aspects		ODP Zero GWP Zero	
Health aspects		Dust & fibre free Halogen free (chlorine, bromine, PVC etc.) Heavy metal (e.g. cadmium, lead) and formaldehyde free	
Other attributes	pH-Value	CE marked Neutral	
Other certificates / approvals		Lloyds Register Type Approved Bureau Veritas Type Approved DNV Type Approved ABS Type Approval IMO MSC.61(67) MED Modul B & D	
Shelf life	Self-adhesive products	1 year	Store in a dry room at a typical relative humidity (between 50 % and 70 %) and room temperature (between 0 °C and +35 °C)
Tolerances		In acc. with DIN EN 14304:2013-04	
Outdoor applications		Needs protection against UV-radiation	See remark (2)

Remark (1) For temperatures below -40 °C please contact our Technical Support Team for advice.

Remark (2) To protect against UV-induced deterioration Kaiflex should be either painted using Kaifinish Color paint or covered with a suitable UV resistant cladding system within 3 days of being installed outdoors.

° The Euroclass rating applies to metallic or solid mineral substrates.

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Kaiflex HFplus s2 Tube · uncoated



Colour: Black / Anthracite · Length: 1,2 m

Copper pipe Cu		Iron & steel pipe Fe			9 mm Insulation thickness			13 mm Insulation thickness		
OD mm	Nom width DN	Inch	OD mm	Nom width DN	Reference	Order No.	m/ carton	Reference	Order No.	m/ carton
10,0	8	1/8	10,2	6	HF+s2-09x010-1,2	4000807 *	228,0	HF+s2-13x010-1,2	4000820 *	134,4
12,0	10		12,5		HF+s2-09x012-1,2	4000808 *	192,0	HF+s2-13x012-1,2	4000821 *	120,0
15,0	10	1/4	13,5	8	HF+s2-09x015-1,2	4000809 *	158,4	HF+s2-13x015-1,2	4000822	108,0
18,0	15	3/8	17,2	10	HF+s2-09x018-1,2	4000810 *	144,0	HF+s2-13x018-1,2	4000823 *	88,8
22,0	20	1/2	21,3	15	HF+s2-09x022-1,2	4000811 *	112,8	HF+s2-13x022-1,2	4000824	80,4
28,0	25	3/4	26,9	20	HF+s2-09x028-1,2	4000812 *	90,0	HF+s2-13x028-1,2	4000825	57,6
35,0	32	1	33,7	25	HF+s2-09x035-1,2	4000813 *	69,6	HF+s2-13x035-1,2	4000826	50,4
42,0	40	1 1/4	42,4	32	HF+s2-09x042-1,2	4000814 *	57,6	HF+s2-13x042-1,2	4000827	42,0
		1 1/2	48,3	40	HF+s2-09x048-1,2	4000815 *	50,4	HF+s2-13x048-1,2	4000828	38,4
54,0	50		54,0		HF+s2-09x054-1,2	4000816 *	45,6	HF+s2-13x054-1,2	4000829	28,8
		2	60,3	50	HF+s2-09x060-1,2	4000817 *	43,2	HF+s2-13x060-1,2	4000830	28,8
76,1	65	2 1/2	76,1	65	HF+s2-09x076-1,2	4000818 *	36,0	HF+s2-13x076-1,2	4000831	27,6
88,9	80	3	88,9	80	HF+s2-09x089-1,2	4000819 *	28,8	HF+s2-13x089-1,2	4000832	24,0

Copper pipe Cu		Iron & steel pipe Fe			19 mm Insulation thickness			25 mm Insulation thickness		
OD mm	Nom width DN	Inch	OD mm	Nom width DN	Reference	Order No.	m/ carton	Reference	Order No.	m/ carton
10,0	8	1/8	10,2	6	HF+s2-19x010-1,2	4000833 *	86,4			
12,0	10		12,5		HF+s2-19x012-1,2	4000834 *	72,0			
15,0	10	1/4	13,5	8	HF+s2-19x015-1,2	4000835 *	67,2	HF+s2-25x015-1,2	4000846 *	39,6
18,0	15	3/8	17,2	10	HF+s2-19x018-1,2	4000836 *	50,4	HF+s2-25x018-1,2	4000847	36,0
22,0	20	1/2	21,3	15	HF+s2-19x022-1,2	4000837	49,2	HF+s2-25x022-1,2	4000848	30,0
28,0	25	3/4	26,9	20	HF+s2-19x028-1,2	4000838	39,6	HF+s2-25x028-1,2	4000849	27,6
35,0	32	1	33,7	25	HF+s2-19x035-1,2	4000839	30,0	HF+s2-25x035-1,2	4000850	24,0
42,0	40	1 1/4	42,4	32	HF+s2-19x042-1,2	4000840	26,4	HF+s2-25x042-1,2	4000851	19,2
		1 1/2	48,3	40	HF+s2-19x048-1,2	4000841	22,8	HF+s2-25x048-1,2	4000852 *	16,8
54,0	50		54,0		HF+s2-19x054-1,2	4000842	21,6	HF+s2-25x054-1,2	4000853	16,8
		2	60,3	50	HF+s2-19x060-1,2	4000843	19,2	HF+s2-25x060-1,2	4000854	14,4
76,1	65	2 1/2	76,1	65	HF+s2-19x076-1,2	4000844	14,4	HF+s2-25x076-1,2	4000855	12,0
88,9	80	3	88,9	80	HF+s2-19x089-1,2	4000845	12,0	HF+s2-25x089-1,2	4000856	9,6

* No stock item, delivery time on request.

For further dimensions please contact our customer service.

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Kaiflex HFplus s2 Tube · uncoated

Colour: Black / Anthracite · Length: 1,2 m

Copper pipe Cu		Iron & steel pipe Fe			32 mm Insulation thickness					
OD mm	Nom width DN	Inch	OD mm	Nom width DN	Reference	Order No.	m/ carton			
10,0	8	1/8	10,2	6						
12,0	10		12,5							
15,0	10	1/4	13,5	8	HF+s2-32x015-1,2	4000857 *	21,6			
18,0	15	3/8	17,2	10	HF+s2-32x018-1,2	4000858 *	21,6			
22,0	20	1/2	21,3	15	HF+s2-32x022-1,2	4000859 *	21,6			
28,0	25	3/4	26,9	20	HF+s2-32x028-1,2	4000860 *	19,2			
35,0	32	1	33,7	25	HF+s2-32x035-1,2	4000861 *	18,0			
42,0	40	1 1/4	42,4	32	HF+s2-32x042-1,2	4000862 *	14,4			
		1 1/2	48,3	40	HF+s2-32x048-1,2	4000863 *	13,2			
54,0	50		54,0		HF+s2-32x054-1,2	4000864 *	10,8			
		2	60,3	50	HF+s2-32x060-1,2	4000865 *	10,8			
76,1	65	2 1/2	76,1	65	HF+s2-32x076-1,2	4000866 *	8,4			
88,9	80	3	88,9	80	HF+s2-32x089-1,2	4000867 *	7,2			

* No stock item, delivery time on request.

C.u.r.: Carton contents upon request.

For further dimensions please contact our customer service.

Kaiflex HFplus s2 Sheet · uncoated · continuous

Colour: Black / Anthracite

Insulation thickness mm	Sheet · continuous 1,2 m width · OD coil: 40 cm · in carton				Sheet · continuous · self-adhesive 1,2 m width · OD coil: 40 cm · in carton			
	Reference	Order No.	rm/ roll	m²/ roll	Reference	Order No.	rm/ roll	m²/ roll
6	HF+s2-06-RL40-1,2	4000868 *	18	21,6	HF+s2-06-RL40-1,2-SK	4000874 *	18	21,6
10	HF+s2-10-RL40-1,2	4000869 *	10	12,0	HF+s2-10-RL40-1,2-SK	4000875 *	10	12,0
13	HF+s2-13-RL40-1,2	4000870	8	9,6	HF+s2-13-RL40-1,2-SK	4000876	8	9,6
19	HF+s2-19-RL40-1,2	4000871	6	7,2	HF+s2-19-RL40-1,2-SK	4000877	6	7,2
25	HF+s2-25-RL40-1,2	4000872	4	4,8	HF+s2-25-RL40-1,2-SK	4000878	4	4,8
32	HF+s2-32-RL40-1,2	4000873	3	3,6	HF+s2-32-RL40-1,2-SK	4000879	3	3,6

* No stock item, delivery time on request.

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