

Elegance that saves space and energy



Floor

convectors

Floor convectors HPM Therm

ATTENTION! Up-to-date offer

Floor convectors *BK* and *BKV* in two qualitative versions:

EXKLUZÍV BK and BKV

- the major emphasis paid to aesthetic and craftsman design
- frame and grill of the identical material
- large selection from dimensional sizes (length/width/depth)
- wide scale of performances
- possibility of production of atypical dimensions
- possible selection of colour of a tank and exchanger for the same price
 - black (copper/aluminium exchanger + zinc plated tank → powdered)
 - natural (copper/aluminium exchanger + tank → stainless steel)
- frame and grill made of solid wood - furniture category

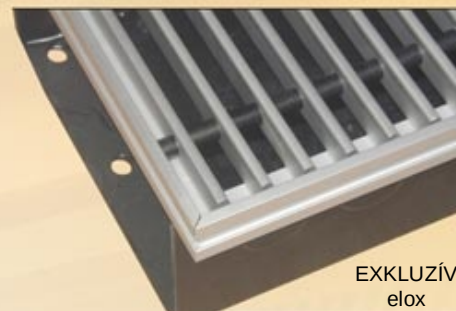


EXKLUZÍV
wood

EKONOMY BKE and BKVE

Brand new

- super price
- simple narrow, stainless steel frame
 - possibility of tank concreting in advance without decision on the type of a grill
 - delivery or selection of grill additionally
- stainless steel tank without further surface treatments
- grills in the version of Al (2 types) and wood (3 types)
- 7 dimensions for length
- uniform width of 270 mm and 2 depths of 112 and 85 mm, with and without ventilator
- delivery term 2 and 6 working days
- production only of standard dimensions
- version with designation of maxi – max. performance (it heats up only with ventilator)



EXKLUZÍV
elox



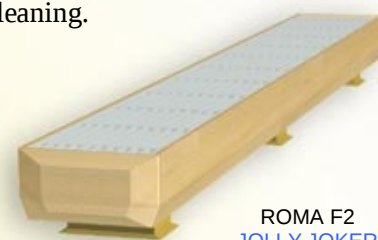
EKONOMY
elox

Do not overlook any other interesting information:

1. Own production of thermal exchangers of high quality on the basis of copper/aluminium.
2. EXKLUZÍV and EKONOMY are offered for forced and natural convection of air.
3. Grills in a craftsman design of a very high quality (elox aluminium and solid wood).
4. Unique application of convector frame made of solid wood in EXKLUZÍV version.
5. Used tangential ventilators for safe voltage of 12V.
6. Offered depths of floor convectors:
 - min. depth of 8 cm, max. depth of 30 cm.
 - the most used depth of BK 8 cm and 11 cm, BKV 8.5 cm and 12 cm.
7. BKV (with ventilator) heat up also without using ventilators.
8. BKV are usable also for additional cooling of interiors.
9. Water volume from 0.5 to 3 l/1 m of convector, immediate response to the change in water temperature.
10. Three-speed manual regulation of ventilator revolutions.
11. Price list price covers the complete equipment of convectors without self-regulation.
12. Delivery term for EXKLUZÍV version 3 to 12 working days.
13. Connection of exchanger vi flexible hoses, as a standard Eurokonus.
14. Flexible connection enables the lifting of exchanger for the purpose of wet cleaning.
15. Connection of flexi hose and valve via Eurokonus, i.e. without sealing, fast assembly and disassembly.
16. In the case of construction problems with building-in of floor convector into the ground, we shall provide you with aesthetical solution of bench convectors (FK) - HPM Therm product.
 - the lowest FK only 128 mm
 - the highest FK 290 mm
 - wide scale of lengths and performances



Flexi hose
with Eurokonus



ROMA F2
JOLLY JOKER

Require corporate materials “Bench convectors”

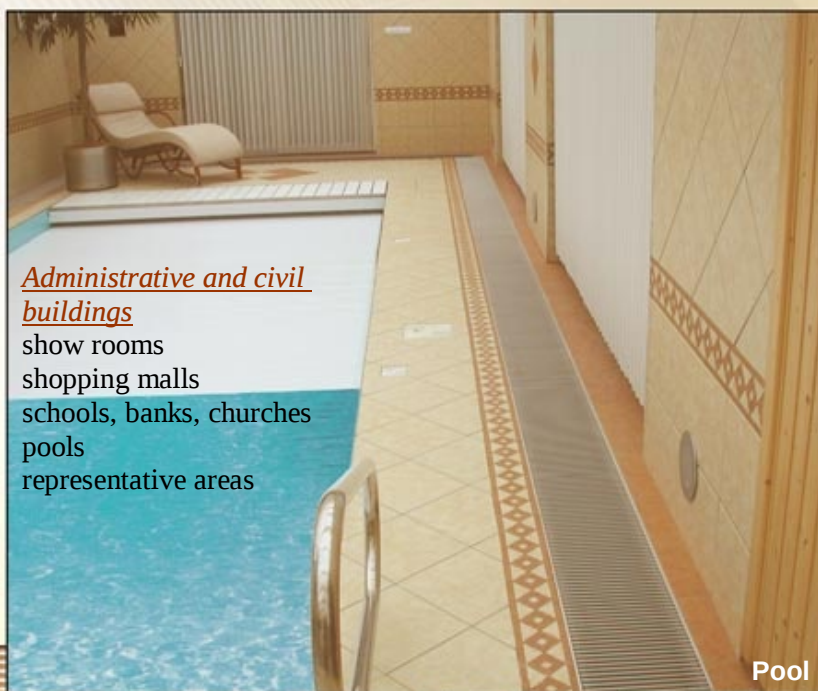
We are pleased by increasing interest and satisfaction with our products

Floor convectors in a word and picture

Harmony of elegant and economic heating

The development of market in floor hot-water convectors (FAN-COILS) recorded a significant expansion within the recent year, in particular thanks to the developing trend of the application of large glassed areas. Even our company, due to the reasons of interest of European and domestic demand, gradually expands the assortment in the field of heating equipment. This is not the system of broadcast heating, but a purposeful location of heating elements in exposed places of interior, in particular large glassed areas.

Floor convectors made by HPM Therm are intended for a large spectrum of application of additional heating of living rooms. Our products address more and more architects, designers, as well as the investors themselves. Thanks to constructional and craftsman design, they build up a stable position on the European market in heating equipment. Technical data are based upon experiments of accredited testing laboratory.



Ø Administrative and civil buildings

- S show rooms
- S shopping malls
- S schools, banks, churches
- S pools
- S representative areas

Ø Living rooms

- S large glassed areas, French windows
- S winter gardens
- S dining and living niches
- S fire place areas



Living room



Hotel
Tri Studničky

Properties

Floor convector made by HPM Therm shall satisfy with its design also the most demanding users. The elegance of the design categorizes our floor convector to furniture category. On contrary to classical radiator elements is visually invisible, it does not disrupt the view to surroundings via glassed walls.

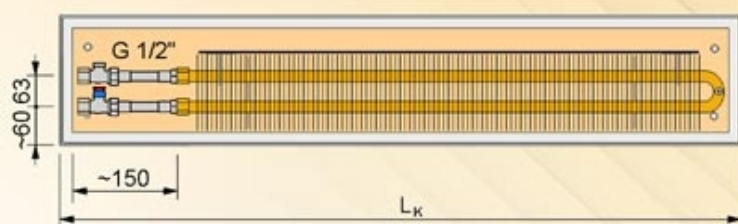
They can be assigned several functions:

- Ÿ they create thermal curtain for glassed areas
- Ÿ they protect glasses from water vapour condensation
- Ÿ indispensable is also the share in the heating of a living room according to the location of heat exchanger (closer to a window or farther from it)
- Ÿ large thermal output and small capacity of heating element gives the floor convector the ability to dynamically response to required increase in heat intensity and at the same time it saves energy necessary for heating up of water.

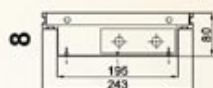
Floor convector BK

Natural convection of air

- floor convector BK for natural circulation of air
- produced as a standard according to drawings in 9 lengths and 6 depths
- it heats up and tempers without the use of forced circulation of air
- possibility of production of tank from stainless steel even with oblique bottom with a drain (without additional surface treatment)
- all types of grills are walkable (Al, beech, oak, maple), easily removable, laterally rolling as a standard (Al), or solid (wood)
- used exchangers (HE) 2, 3, 4, 6 and 8 pipes terminated with 1/2" thread
- frame material is identical with grill material
- BK is height adjustable and fixable

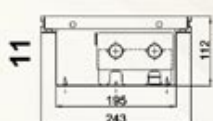


BK2 /243/80

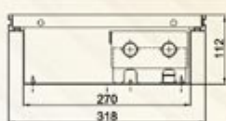


Produced types:

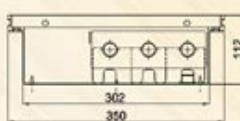
BK2 /243/112



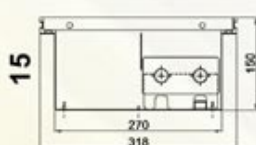
BK2 /318/112



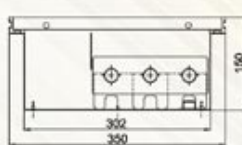
BK3 /350/112



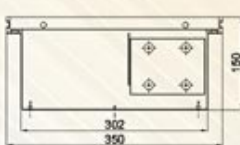
BK2 /318/150



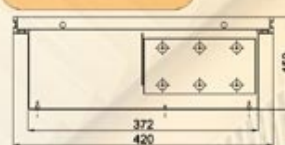
BK3 /350/150



BK2x2 /350/150

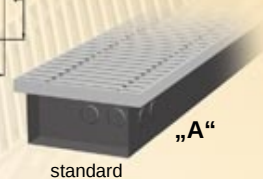


BK2x3 /420/150



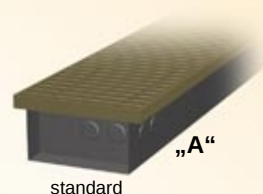
Type designation

Al natural elox (NE)



standard

Al light bronze elox (SB)



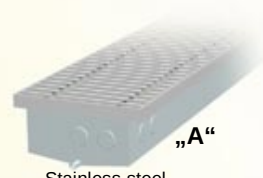
standard

Beech wood (BK)



standard

Al natural elox (NE)



Stainless steel

tank with a drain of Ø15mm

Used Cu /Al exchangers

2R



3R



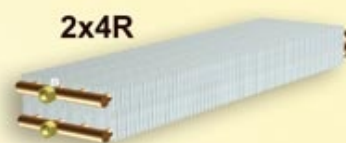
2x2R



2x3R



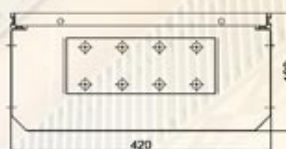
2x4R



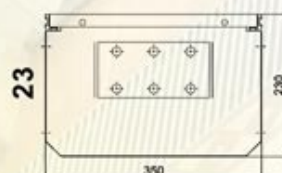
BK2x3 /350/190



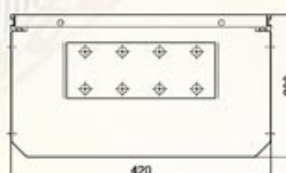
BK2x4 /420/190



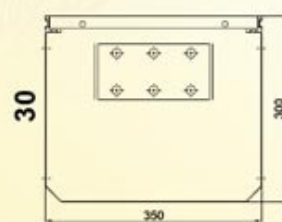
BK2x3 /350/230



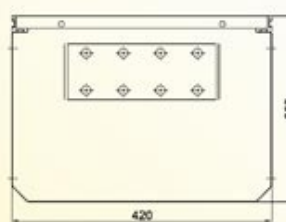
BK2x4 /420/230



BK2x3 /350/300



BK2x4 /420/300



Version with a drain
Valid for all types

B	wh
243	7
318	10
350	12
420	15

B - width of a tank, Al elox



Floor convector BK

Thermal output Q [W]

Length L_K [mm]	Depth [mm]	80				112				150			190		230		300	
	Width [mm]	243	243	318	350	318	350	420	350	420	350	420	350	420	350	420	350	420
950	ΔT_{60}	322	347	417	473	447	524	598	548	682	579	723	595	772				
	ΔT_{50}	244	263	316	358	339	397	453	415	517	439	548	451	585				
1250	ΔT_{60}	470	507	610	691	654	766	874	801	997	846	1056	869	1128				
	ΔT_{50}	356	384	462	523	495	580	662	607	755	641	800	658	855				
1550	ΔT_{60}	619	668	803	909	860	1008	1150	1054	1311	1113	1390	1144	1484				
	ΔT_{50}	469	506	608	689	652	764	871	798	993	843	1053	867	1124				
1850	ΔT_{60}	767	828	995	1127	1066	1249	1426	1307	1626	1380	1724	1418	1840				
	ΔT_{50}	581	627	754	854	808	946	1080	990	1232	1045	1306	1074	1394				
2150	ΔT_{60}	916	988	1188	1345	1273	1491	1702	1560	1941	1647	2057	1693	2196				
	ΔT_{50}	694	748	900	1019	964	1130	1289	1182	1470	1248	1558	1283	1664				
2450	ΔT_{60}	1064	1148	1380	1563	1479	1733	1978	1812	2255	1914	2391	1967	2552				
	ΔT_{50}	806	870	1045	1184	1120	1313	1498	1373	1708	1450	1811	1490	1933				
2750	ΔT_{60}	1213	1308	1573	1781	1686	1975	2254	2065	2570	2181	2724	2242	2908				
	ΔT_{50}	919	991	1192	1349	1277	1496	1708	1564	1947	1652	2064	1698	2203				
3050	ΔT_{60}	1361	1469	1766	1999	1892	2217	2530	2318	2885	2448	3058	2516	3264				
	ΔT_{50}	1031	1113	1338	1514	1433	1680	1917	1756	2186	1855	2317	1906	2473				
3350	ΔT_{60}	1510	1629	1958	2217	2098	2458	2806	2571	3199	2715	3392	2791	3620				
	ΔT_{50}	1144	1234	1483	1680	1589	1862	2126	1948	2423	2057	2570	2114	2742				

Thermal outputs [W] at $t_{w1} / t_{w2} / t_i$:

$\Delta T = (t_{w1} + t_{w2}) / 2 - t_i$

85/75/20°C (ΔT_{60}); 75/65/20°C (ΔT_{50})

t_{w1} - temperature of incoming water
 t_{w2} - temperature of outgoing water
 t_i - temperature of interior

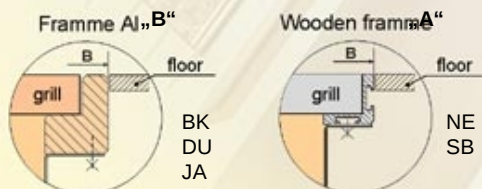
For other ΔT :

E.g.: BK2 / 243 / 80 - 1850 na $\Delta T = 38K$

$Q = Q_{\Delta T_{50}} \times k_f = 581 \times 0,659 = 382,9 W$

Details of "frame - floor"

Correction factor k_f for ΔT



BEECH FRAMES

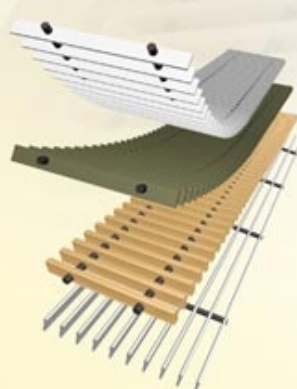
Frame Al :
 $B \times L_K$ - see pictures and tables

Wooden frame :
 $B \times L_K = AL \text{ rám} + 14 \text{ mm}$

ΔT	15	20	22	24	26
k_f	0,160	0,248	0,287	0,327	0,370
ΔT	28	30	32	34	36
k_f	0,414	0,460	0,507	0,556	0,607
ΔT	38	40	42	44	46
k_f	0,659	0,712	0,767	0,823	0,881
ΔT	48	50	52	54	56
k_f	0,940	1,000	1,061	1,124	1,188
ΔT	58	60	62	64	66
k_f	1,253	1,320	1,387	1,456	1,526

Materials of frames (yy)

Type and material of a grill (zz)



- a/ aluminium - natural elox (NE, NE)
- b/ aluminium - bronze elox (SB, SB)
- c/ wood - beech (BK)
- d/ wood - oak (DU)
- e/ wood - maple (JA)

Solid grill (PM):

- a/ aluminium
- natural elox
- b/ aluminium
- bronze elox
- c/ wood - beech
- d/ wood - oak

Rolling grill (RM):

- a/ aluminium
- natural elox
- b/ aluminium
- bronze elox

* longitudinal elox grill upon a special request

Sample of order:

BK2 /243/112 - xxxx - yy - zz / type of tank

BK2 /243/112 - type designation
 xxxx - lenght L_K [mm]
 yy - frame material
 zz - grill type

Type of a tank

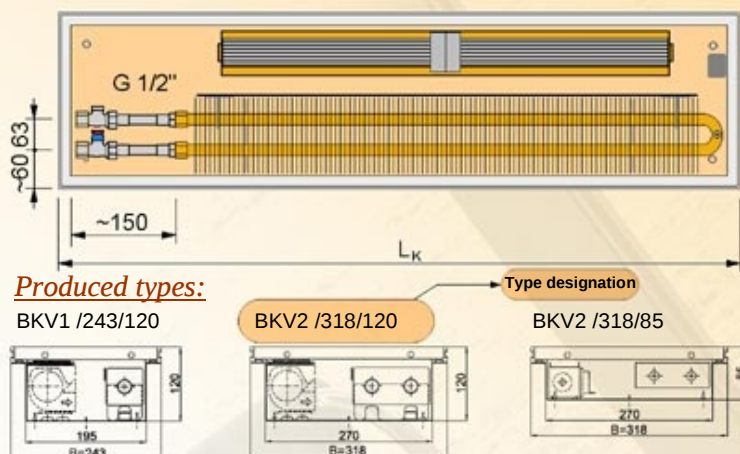
S - standard tank
 N - stainless steel tank
 No - with drain



Floor convector BKV BKV

Forced circulation of air

- floor convector BKV, produced as a standard with tangential ventilator with powering voltage of 12V
- it heats up, temperates also at switched off ventilator
- silent operation of ventilator, noise level at the highest output of max. 40 dB
- 3-grade regulation of revolutions
- possibility of production of a tank from stainless steel with an oblique bottom also with drain (without further surface treatment)
- all types of grills are walkable (Al, beech, oak, maple), easily removable, laterally rolling as a standard (Al), or solid (wood)
- frame material is identical with grill material
- used heat exchangers (HE) 1 and 2 pipes terminated with 1/2" thread
- BKV is height adjustable and fixable



Produced types:

BKV1 / 243/120

BKV2 / 318/120

BKV2 / 318/85

Thermal output Q [W]

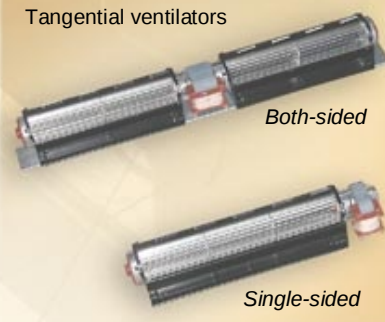
				0 Revolutions of ventilator switched off		1 Revolutions of ventilator minimal		2 Revolutions of ventilator medium		3 Revolutions of ventilator medium		Electric input of ventilator P _{max} (W)
Type	Width /mm/	Depth /mm/	Length L _K / mm /	ΔT ₆₀	ΔT ₅₀	ΔT ₆₀	ΔT ₅₀	ΔT ₆₀	ΔT ₅₀	ΔT ₆₀	ΔT ₅₀	
BKV1	243	120	950	267	202	466	381	528	432	639	523	48
			1250	390	295	682	558	772	632	934	764	80
			1550	513	389	897	734	1016	831	1229	1006	94
			1850	636	482	1112	910	1260	1031	1524	1247	96
			2150	759	575	1328	1087	1503	1230	1819	1489	130
			2450	882	668	1542	1262	1746	1429	2113	1729	144
			2750	1005	761	1758	1439	1990	1628	2408	1971	184
			3050	1128	855	1973	1615	2234	1828	2703	2212	188
			3350	1251	948	2188	1791	2478	2028	2998	2453	192
BKV2	318	120	950	473	360	1148	939	1295	1060	1573	1287	48
			1250	693	527	1677	1372	1893	1549	2299	1881	80
			1550	911	693	2207	1806	2492	2039	3032	2481	94
			1850	1130	860	2736	2239	3089	2528	3752	3070	96
			2150	1349	1026	3296	2673	3687	3017	4478	3664	130
			2450	1567	1192	3796	3106	4286	3507	5204	4258	144
			2750	1786	1359	4325	3539	4883	3996	5930	4852	184
			3050	2005	1525	4855	3973	5481	4485	6655	5446	188
			3350	2223	1691	5384	4406	6080	4975	7383	6041	192
BKV2	318	85	950			755	618	855	700	1034	846	30
			1250			1103	903	1249	1022	1511	1236	43
			1550			1451	1187	1643	1345	1988	1627	56
			1850			1799	1472	2037	1667	2465	2017	68
			2150			2147	1757	2431	1989	2942	2408	81
			2450			2496	2043	2826	2313	3419	2798	94
			2750			2844	2327	3220	2635	3896	3188	107
			3050			3192	2612	3614	2957	4373	3579	119
			3350			3540	2897	4008	3280	4850	3969	132
Thermal outputs [W] at t _{w1} / t _{w2} / t _i :						t _{w1} -temperature of incoming water			For other ΔT E.g.:			
ΔT=(t _{w1} +t _{w2})/2-t _i						t _{w2} -temperature of outgoing water			BKV2 / 318 / 120 - 2150 for ΔT=54K			
85/75/20 °C (ΔT60); 75/65/20 °C (ΔT50)						t _i -temperature of interior			Q=Q ₂₅₀ ·k _v = 1026 x 1,088 = 1116,3 W			

Thermal outputs [W] at t_{w1} / t_{w2} / t_i :
 ΔT=(t_{w1}+t_{w2})/2-t_i
 85/75/20°C (ΔT60); 75/65/20°C (ΔT50)

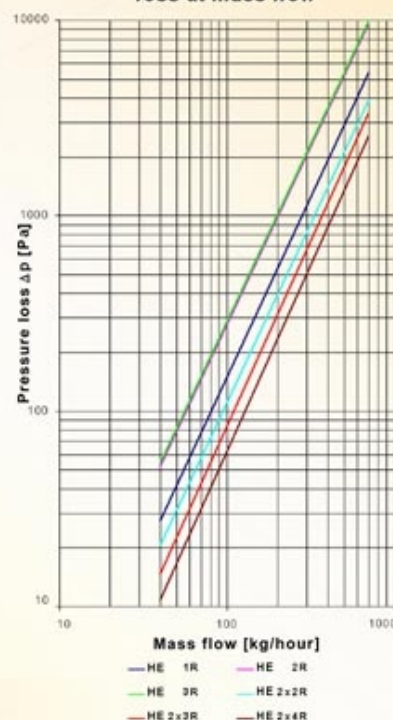
t_{w1}-temperature of incoming water
 t_{w2}-temperature of outgoing water
 t_i-temperature of interior

For other ΔT E.g.:
 BKV2 / 318 / 120 - 2150 for ΔT=54K
 Q=Q₇₀ × k_f = 1026 × 1,088 = 1116,3 W

Tangential ventilators



Dependence of pressure loss at mass flow



Correction factor k_f for DT

ΔT	15	20	22	24	26	28	30	32	34	36	38
k _f	0,266	0,365	0,405	0,446	0,487	0,528	0,570	0,612	0,654	0,697	0,739
ΔT	40	42	44	46	48	50	52	54	56	58	60
k _f	0,782	0,825	0,869	0,912	0,956	1,000	1,044	1,088	1,133	1,177	1,222

Sample of order:

BKV2 / 318/120 - xxxx - yy - zz / type of a tank

BKV2 / 318/120 - type designation

xxxx - lenght L_K [mm]

yy - frame material

zz - grill type

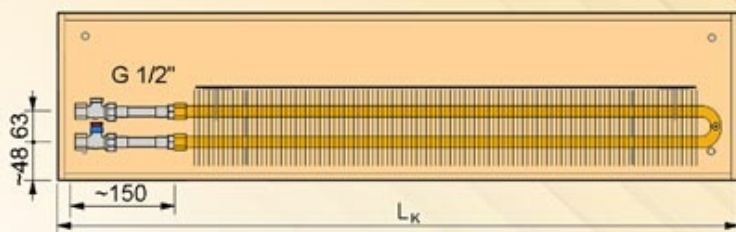
Type of a tank

N - stainless steel tank

No - with drain

Floor convectors BK2E, BKV2E - EKONOMY

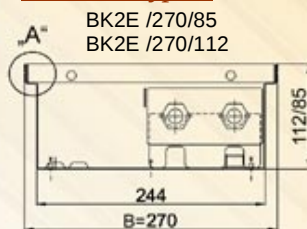
natural convection of air



Thermal output Q [W]

Width B /mm/	Type	BK2E 112		BK2E 85	
	Depth /mm/				
270	Length L _k /mm/	ΔT ₆₀	ΔT ₃₀	ΔT ₆₀	ΔT ₃₀
	1000	443	340	366	281
	1250	593	454	490	376
	1500	743	569	614	471
	1750	893	684	824	627
	2000	1042	799	861	661
	2500	1342	1028	1109	851
3000	1641	1258	1356	1041	

Produced types:

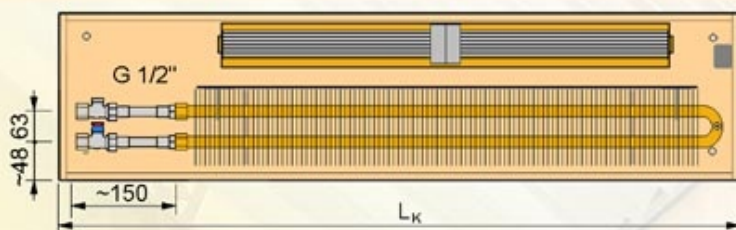


Correction factor k_f for ΔT

ΔT	15	20	22	24	26	28	30	32	34	36	38
k _f	0,164	0,253	0,292	0,333	0,375	0,419	0,465	0,512	0,561	0,611	0,663
ΔT	40	42	44	46	48	50	52	54	56	58	60
k _f	0,716	0,770	0,826	0,882	0,941	1,000	1,061	1,122	1,185	1,249	1,315

- floor convectors EKONOMY are produced as a standard with a tank made of stainless steel, exchanger in natural version
- participation in economy of floor convector has:
 - a simple frame made of stainless steel
 - colourless surface treatment of a tank, exchanger
 - use of standard 12V tangential ventilators, noise level up to 40 dB
 - lower number of ventilators than for BKV2
 - narrowed type range - 7 lengths, 1 width and 2 depths
 - sufficient output range
 - it temperates also at switched off ventilator
- increase in performance shall be achieved by using BKV2E maxi
 - hot-water area increased by ca 35%
 - BKV2E maxi operable only with switched on ventilator
 - other details are identical with EXKLUSIV types
 - BK is height adjustable and fixable
 - possibility of tank concreting in advance without the decision on the type of a grill, selection and delivery of a grill additionally

Forced circulation of air

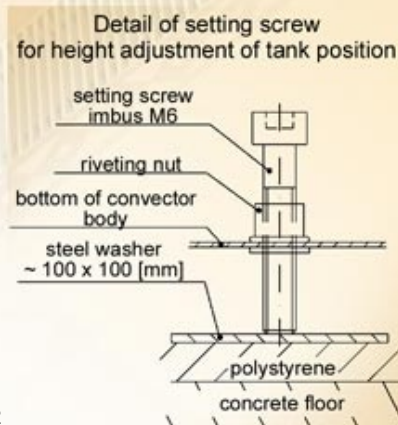
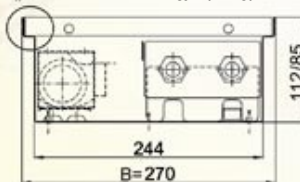


Thermal output Q [W]

Width B /mm/	Type	BKV2E 112			BKV2E 85			Electric input of ventilator P _{vent} (W)
	Depth /mm/	Length L _k /mm/	ΔT ₅₀ (75/65/28) Revolutions of ventilator	ΔT ₃₀ (75/65/28) Revolutions of ventilator	ΔT ₅₀ (75/65/28) Revolutions of ventilator	ΔT ₃₀ (75/65/28) Revolutions of ventilator	ΔT ₅₀ (75/65/28) Revolutions of ventilator	
270	1000	831	947	1138	642	731	879	48
	1250	996	1134	1363	755	860	1033	48
	1500	1125	1281	1540	846	964	1158	48
	1750	1763	2008	2413	1322	1506	1810	96
	2000	2058	2344	2817	1518	1729	2078	96
	2500	2305	2625	3155	1696	1932	2322	96
	3000	3251	3702	4450	2387	2718	3267	144

Produced types:

BKV2E /270/85
BKV2E /270/112
BKV2E maxi /270/85
BKV2E maxi /270/112



Correction factor k_f for DT

ΔT	k _f	ΔT	k _f
15	0,382	40	0,837
20	0,480	42	0,870
22	0,519	44	0,903
24	0,556	46	0,935
26	0,593	48	0,968
28	0,629	50	1,000
30	0,665	52	1,032
32	0,700	54	1,064
34	0,735	56	1,095
36	0,769	58	1,126
38	0,803	60	1,157

For other ΔT E.g.:
BKV2E / 270 / 112 - 2000 for ΔT=40K
Q=2817 x 0,837 =2357,8 W

Thermal output Q [W] – BKV2E maxi*

Width B /mm/	TYP	BKV2E maxi 112			BKV2E maxi 85			Electric input of ventilator P _{vent} (W)
	Depth /mm/	Length L _k /mm/	ΔT ₅₀ (75/65/28) Revolutions of ventilator	ΔT ₃₀ (75/65/28) Revolutions of ventilator	ΔT ₅₀ (75/65/28) Revolutions of ventilator	ΔT ₃₀ (75/65/28) Revolutions of ventilator	ΔT ₅₀ (75/65/28) Revolutions of ventilator	
270	1000	1005	1144	1375	787	896	1077	48
	1250	1188	1353	1626	915	1042	1252	48
	1500	1325	1509	1814	1016	1156	1390	48
	1750	2120	2414	2902	1607	1830	2199	96
	2000	2458	2800	3365	1843	2099	2523	96
	2500	2733	3113	3741	2044	2328	2798	96
	3000	3869	4406	5296	2881	3281	3944	144

Sample of order:

BKV2E /270/112 - xxxx - zz / type of a tank
BKV2E/270/112 - type designation
xxxx - length L_k [mm]
zz - grill type

Type of a tank
N - stainless steel tank
No -with drain

BK2E - natural convection
BKV2E - forced circulation
BKV2E maxi - only forced circulation , max. Q

* BKV2E maxi
heats up only at switched on ventilator

Regulation of floor convectors

Thermal output of convectors may be regulated:

▼ At the side of water

- by change of temperature of water in exchanger
- by change of flow by means of thermostatic head with capillary

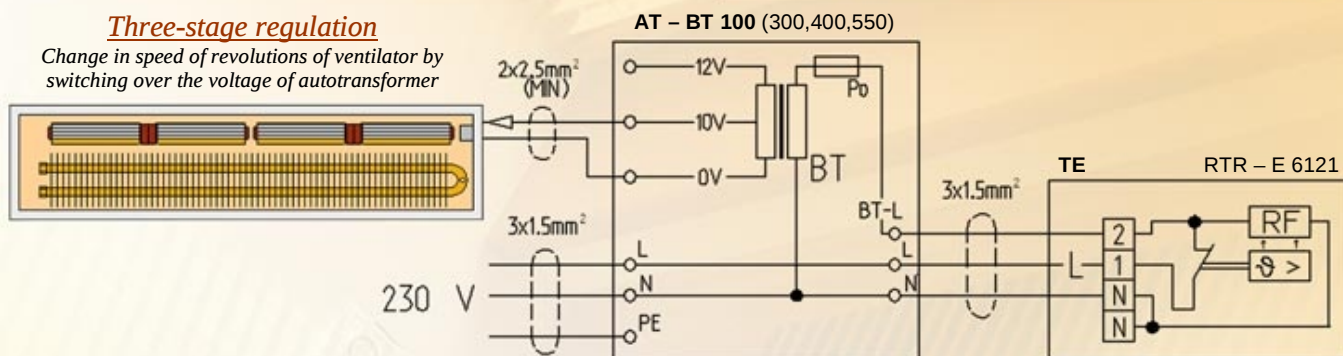
▼ At the side of air

- by change of revolutions of ventilator
 - single-stage regulation (medium revolutions of ventilators)
 - three-stage regulation (min./medium/max. revolutions of ventilators)



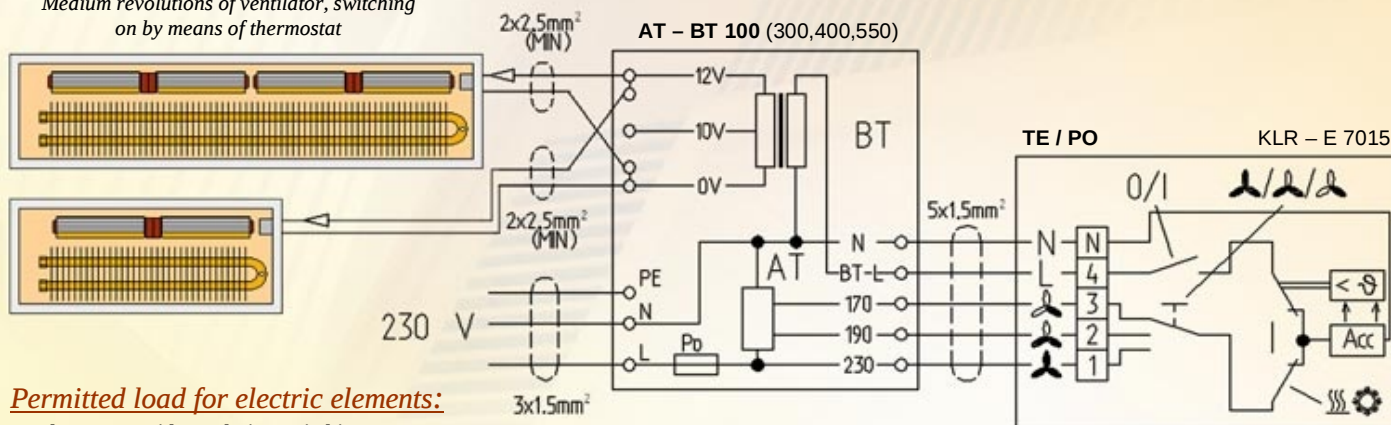
Three-stage regulation

Change in speed of revolutions of ventilator by switching over the voltage of autotransformer



Single-stage regulation

Medium revolutions of ventilator, switching on by means of thermostat



Permitted load for electric elements:

- **Thermostat with revolution switching over**
 - TE / PO (KLR – E 7015) - 230V/3A
- **Thermostat**
 - TE (RTR – E 6121) - 230V/3A
- **Transformers AT(230V/190V/170V) - BT(230V/10V/12V)**
 - AT-BT 100 - 100VA
 - AT-BT 300 - 300VA
 - AT-BT 400 - 400VA
 - AT-BT 550 - 550VA

i.e. transformers AT-BT 400 may be connected to a group of convectors with max. electric input of ventilators of 400W.

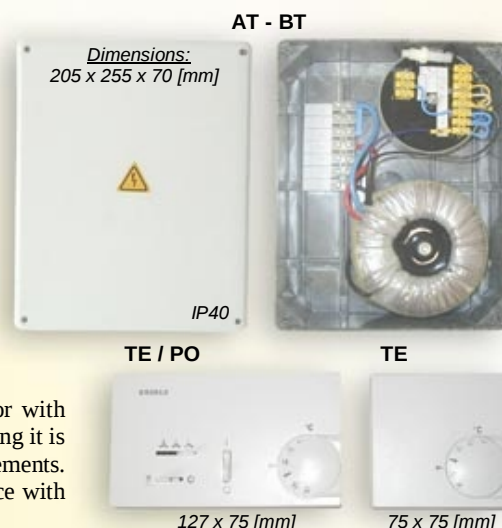
For example.:
 BKV2/243/112-1850.....1ks.....96x1 = 96W
 BKV2/243/112-2450.....2ks.....144x2 = 288W
 384W

According to the requirements of the customer, it is possible to combine the regulation of convectors with various regulation elements. The combinations may be made with regards to the number of regulated convectors, i.e. to the permitted electric load of the individual components.

Important:

From the point of view of electrical connection, design and assembly of floor convector with ventilator must be in accord with STN and valid regulations. While designing and assembling it is necessary to adhere to max. permitted load and safeguarding of the individual electrical elements. Prior to putting into operation, it is necessary to carry out initial revision of electric device with record made to warranty certificate.

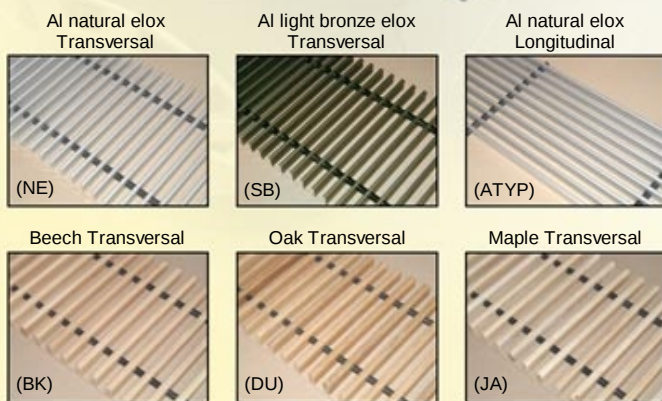
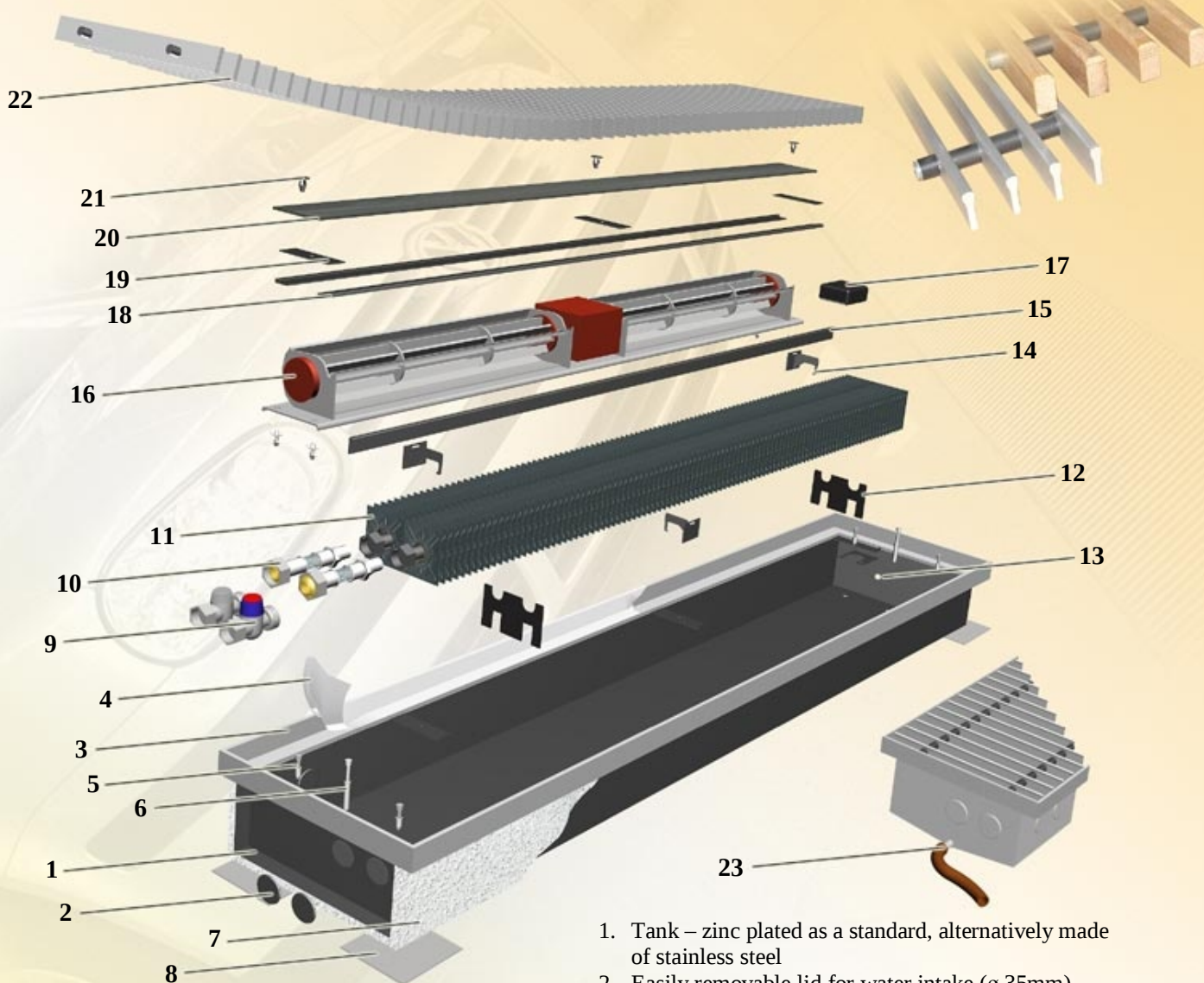
Notice: 3rd speed level (maximal revolutions of ventilators) serves for a short-term intensive heating up



Floor convector BKV2

details of a standard convector

Standard profiles of grills

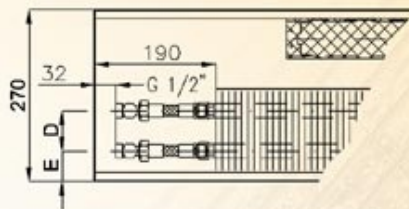


1. Tank – zinc plated as a standard, alternatively made of stainless steel
2. Easily removable lid for water intake (ø 35mm)
3. Al frame – elox
4. Protective frame foil
5. Setting screws of the height position of a tank
6. Fixation dowel pin with a screw
7. Recommended insulation (e.g. polystyrene min. 1cm)
8. Washers for setting screws
9. Regulation valves
10. Flexible connecting hoses with end-pieces Eurokonus
11. Heat exchangers with deaeration valve and connections of G ½“
12. Plastic pad enabling the dilatation of exchanger
13. Transition piece for el. wiring
14. Side plastic pad
15. Side Al lath enhancing the chimney effect
16. Tangential ventilator 12V
17. Electric terminal board
18. Frame of protective mat
19. Holder of protective mat
20. Protective mat
21. Securing element of a mat
22. Al rolling grill
23. Draining of stainless steel tank (pipe of ø 15mm)

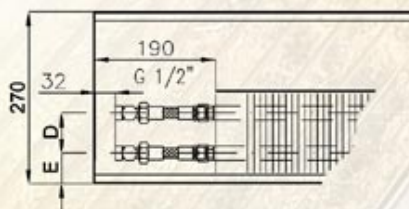
Floor convectors BK, BKV, BKE, BKVE

assembly connection dimensions

1. BKV2E/270/85
BKV2E/270/112



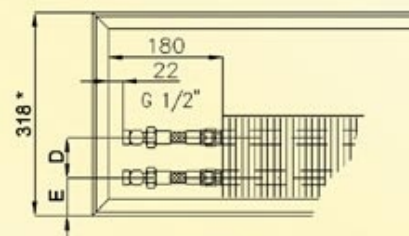
2. BK2E/270/85
BK2E/270/112



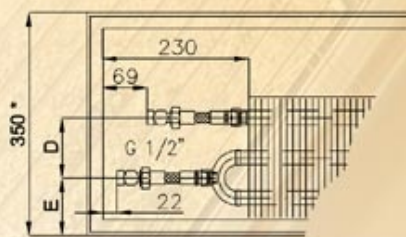
3. BK2/243/80
BK2/243/112



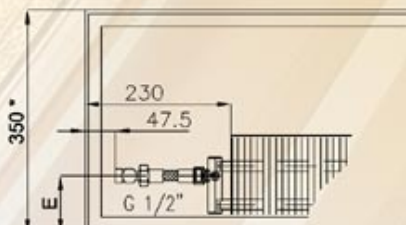
4. BK2/318/112
BK2/318/150



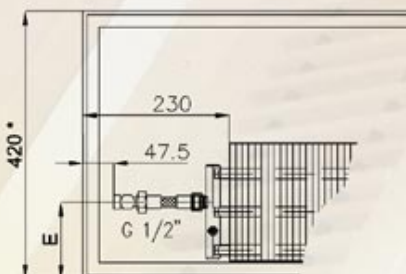
5. BK3/350/112
BK3/350/150



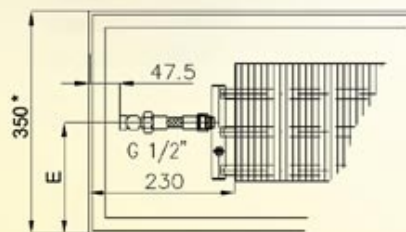
6. BK2x2/350/150



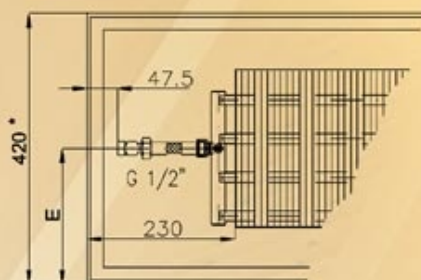
7. BK2x3/420/150



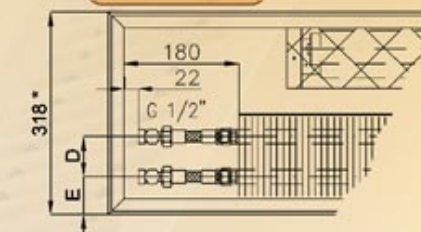
8. BK2x3/350/190
BK2x3/350/230
BK2x3/350/300



9. BK2x4/420/190
BK2x4/420/230
BK2x4/420/300



10. BKV2/318/85
BKV2/318/120



11. BKV1/243/120

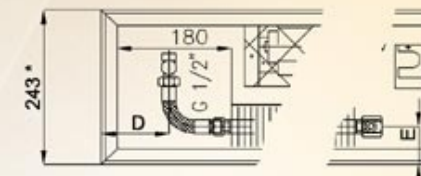


fig. 3 and 10 – The most popular and best selling types

* – such designated dimensions are valid for frame Al elox


Eurokonus
Connection without sealing

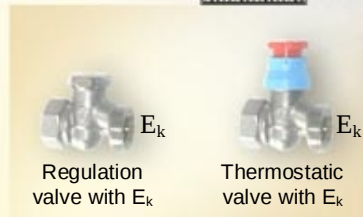
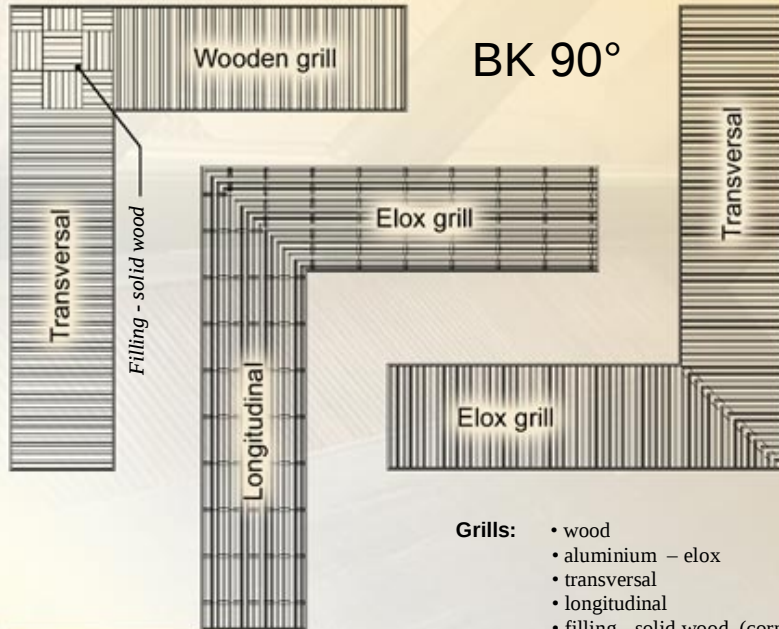


Figure No.	Type	D	E
1.	BKV2E/270/112	63	48
	BKV2E/270/85	63	48
2.	BK2E/270/112	63	48
	BK2E/270/85	63	48
3.	BK2/243/80	63	60
	BK2/243/112	63	60
4.	BK2/318/112	63	60
	BK2/318/150	63	60
5.	BK3/350/112	95	90
	BK3/350/150	95	90
6.	BK2x2/350/150	-	90
7.	BK2x3/420/150	-	120
8.	BK2x3/350/190	-	175
	BK2x3/350/230	-	175
	BK2x3/350/300	-	175
9.	BK2x4/420/190	-	210
	BK2x4/420/230	-	210
	BK2x4/420/300	-	210
10.	BKV2/318/120	63	60
	BKV2/318/85	63	60
11.	BKV1/243/120	105	60

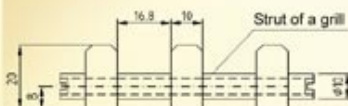
Recommendations and possibilities

angles, accessories, spacing of grills, transfers of BK - floor

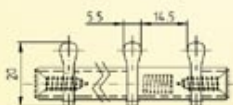
In addition to a standard dimensions, the Slovak producer HPM Therm offers also the professional custom-made solutions of various lengths and angles $90 \leq \alpha \leq 180^\circ\text{C}$ for extra price (see price list).



Standard heights and spacing of grills



Wooden grill (solid wood)



Aluminium grill elox

Strut of a grill – black elox as a standard

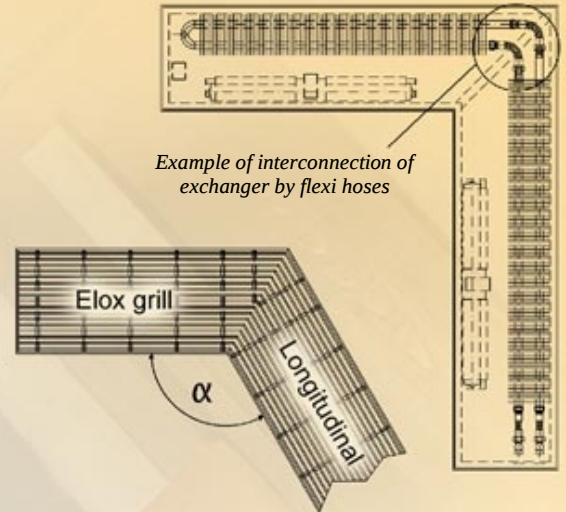
**Thermostatic valve with capillary
(2, 5, 10 m)**



Regulation of temperature by thermostatic valve with a capillary is an elegant solution of regulation of temperature of a space.

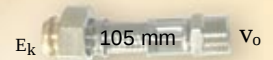
Do not forget!

To build in the capillary into a wall - the best solution via installed electrical installation pipe in a wall.



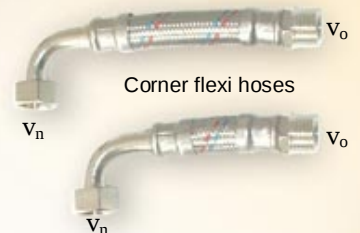
BK – floor conveyor in general

Used flexi hoses for various practical applications

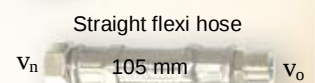


Flexi hose with Eurokonus

- in a standard delivery



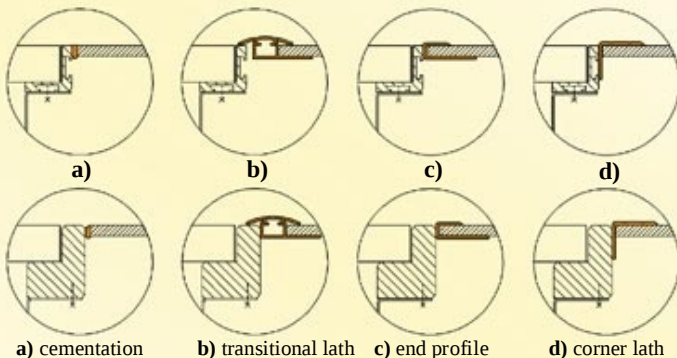
Corner flexi hoses



Straight flexi hose

Legend: v_o - external thread $G \frac{1}{2}$ "
 v_n - internal thread $G \frac{1}{2}$ "
 E_k - Eurokonus $G \frac{3}{4}$ "

Recommendations for solution of transfer of floor convector - floor:



Example of elegant solution with corner lath d)

Assembly instructions

- convector is to be installed into a prepared opening in a floor including frame
- distance from a wall 50 ÷ 100 mm (1)
- we recommend to wrap the external surface of a tank by thermo-insulation material (1)
- the upper edge of a frame (grill) at the level of future floor, (6) use setting screws (4) for this purpose
- use assembly cover against impurities and damage, which is the part of convector - not walkable (4)
- insert the attached struts into the frame, that shall prevent the deformation of a frame (5) prior to concreting
- protect grill against damage, as a standard, the grill is wrapped in PVC foil (1)
- we recommend to use the attached flexible hoses due to a possible lifting of exchanger in the case of necessity of a thorough tank cleaning (3)
- connect hot water ► to a pipe that is further from the intake of cold air or ventilator (at the location of intake/outlet above each other - hot water to the upper connection branch)
- convectors with ventilator must be connected to a spatial thermostat and regulation transformer (see wiring diagram)
- after pouring water into the system, regulate hydraulics of the system and deareate (6)
- use some of the premoulded openings of Ø 35 mm for the pipe of hot and cold water

Maintenance

- after assembly of heating system it is necessary to thoroughly clean a tank, grill and frame of convector
- *practice assures us of the inconsistency of cleaning**
- always prior to heating season, we recommend to vacuum dust or wet clean
- outside the heating season, we recommend to locate a protective foil under the grill, that shall prevent the sedimentation of a dust in summer months

Scope of delivery

- tank coated by a black powdered paint or stainless steel with setting screws and washers
- Cu/Al heat exchanger with surface treatment according to the type of a tank (black, natural)
- the relevant frame with a grill in a protective foil
- connecting flexible hoses with stainless steel casing + regulation valves
- assembly cover with struts
- for BKV types, tangential ventilators connected to terminal board (according to order AT+BT, thermostat with revolution switching over)
- the part of delivery are assembly instructions and warranty certificate

Warranty

- 10 years for lamellar Cu/Al exchanger
- 10 years against corrosion of a tank
- 2 years for ventilators and other used parts

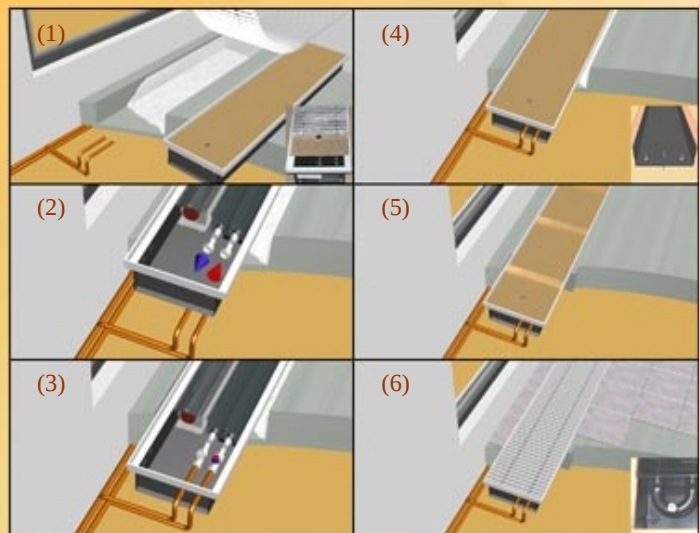
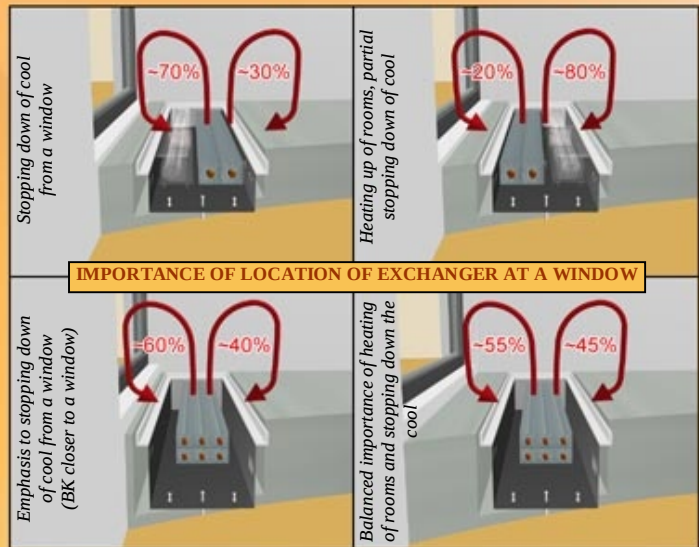
The warranty does not apply to the following:

- damages caused by mishandling
- mechanical damage caused by unprofessional handling

Packing

- individually reinforced by fibreboard and PVC foil
- as a group on wooden palette or simple wooden siding

/HPM Therm reserves the right to make constructional modifications./



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www.hpmcoil.sk

Your vendor: