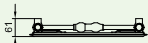
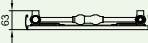


Technical data Verteo® Profil/Plan/Line radiators

Brief product description			RAL GZ- Reg. No.	Heights (BH) mm	Lengths (BL) mm	Depths (BT) mm
Verteo Profil (FSN)						
Type 10	single row		0903	1200 - 2200	300 - 800	61
Type 20 x2	double row without convector with cover with serial flow concept		0904	1200 - 2400	300 - 800	64
Type 21 x2	double row with convector with cover with serial flow concept		0905	1200 - 2400	300 - 800	64
Type 22 x2	double row with two convectors with cover with serial flow concept		0906	1200 - 2400	300 - 800	100
Verteo Plan / Verteo Line (PSN / PLS)						
Type 10	single row		1210	1200 - 2200	300 - 800	63
Type 20 x2	double row without convector with cover with serial flow concept		0907	1200 - 2400	300 - 800	66
Type 21 x2	double row with convector with cover with serial flow concept		0908	1200 - 2400	300 - 800	66
Type 22 x2	double row with two convectors with cover with serial flow concept		0909	1200 - 2400	300 - 800	102

Verteo Profil / Verteo Plan / Verteo Line

Connections

4 x 1/2" internal thread at bottom
2 x 1/2" internal thread at top
connection from top and bottom possible.
Flow always on left, return always on right.
50 mm centre connection makes the installation of a valve shut-off block possible.

Operating conditions

max. operating temperature 110 °C,
max. operating pressure 10 bar
(test pressure 13 bar)

Scope of delivery

Incl. lugs, primed and powder-coated.
Side covers. Installation accessories (short wall brackets, screws, dowels, dehinging safety devices, sound insulation clips, blanking and air vent plugs, spacers) included without surcharge.

Fixing

Lug mounting with 4 lugs. Quick and easy installation with wall brackets included as standard in the delivery.
Orientation in horizontal and vertical direction possible.

Paint finish

Kermi white (RAL 9016)
Customised colouring also possible with the Kermi colour concept.



Verteo®.

Comfort in a modern form

- With energy-saving x2 technology
- In slimline upright version
- Smooth front section, finely profiled front panel or distinctive profiled look
- Wide range of sizes and colours available



Verteo® Profil / Plan / Line

General description



Scope of delivery

- Kermi Verteo Profil / Verteo Plan / Verteo Line incl. lugs, primed and powder-coated
- Side covers
- Installation set included without surcharge

Fixing

- Lug mounting with 4 lugs
- Quick and easy installation with wall brackets included as standard in the delivery
- Orientation in horizontal and vertical direction possible

Paint finish

- Brilliant two-coat painting, emission-free and environmentally friendly, no drips
- according to DIN 55900-FWA: degreased, iron-phosphated, primed with electrodeposition paint (EDP) and powder coated (EPS)
- Standard: Kermi white (RAL 9016)
- Colour finish according to Kermi colour concept

Quality

- RAL-tested
- All radiators are checked for watertightness
- Max. operating pressure: 10 bar
- Test pressure: 13 bar
- Max. operating temperature: 110 °C
- Certification according to DIN EN ISO 9001:2015

Packaging

- Packed in box and shrink-wrapped in film, ready to install
- Protective packaging, i.e. packaging does not need to be removed for installation

Connection

- 4 x G 1/2" internal thread at bottom
- 2 x G 1/2" internal thread at top
- Connection from top and bottom possible
- 50 mm centre connection makes the installation of a valve shut-off block possible

Please note: Operating conditions and water quality according to VDI 2035 must be respected, as well as the industry-standard installation regulations.

Verteo® Profil

Weight, water content

Type 10								Type 20						
Height mm		1200	1400	1600	1800	2000	2200	1200	1400	1600	1800	2000	2200	2400
Length mm	kg	7,42	8,49	9,56	10,63	11,69	12,76	14,85	17,05	19,26	21,47	23,67	25,88	28,09
	l	2,05	2,18	2,30	2,43	2,56	2,69	4,10	4,35	4,61	4,86	5,12	5,38	5,63
400	kg	9,40	10,79	12,18	13,58	14,97	16,36	18,78	21,63	24,48	27,33	30,18	33,04	35,89
	l	2,73	2,90	3,07	3,24	3,41	3,59	5,46	5,80	6,14	6,49	6,83	7,17	7,51
500	kg	11,38	13,10	14,81	16,53	18,24	19,96	22,72	26,21	29,71	33,20	36,70	40,19	43,69
	l	3,41	3,63	3,84	4,05	4,27	4,48	6,83	7,25	7,68	8,11	8,54	8,96	9,39
600	kg	13,36	15,40	17,44	19,48	21,51	23,55	26,65	30,79	34,93	39,07	43,21	47,35	51,48
	l	4,10	4,35	4,61	4,86	5,12	5,38	8,19	8,70	9,22	9,73	10,24	10,76	11,27
700	kg	15,34	17,70	20,06	22,43	24,79	27,15	30,59	35,37	40,15	44,94	49,72	54,50	59,28
	l	4,78	5,08	5,38	5,68	5,97	6,27	9,56	10,15	10,75	11,35	11,95	12,55	13,15
800	kg	17,32	20,01	22,69	25,38	28,06	30,74	34,53	39,95	45,38	50,80	56,23	61,66	67,08
	l	5,46	5,80	6,14	6,49	6,83	7,17	10,92	11,60	12,29	12,97	13,66	14,34	15,02

Type 21									Type 22						
Height mm		1200	1400	1600	1800	2000	2200	2400	1200	1400	1600	1800	2000	2200	2400
Length mm	kg	16,43	18,64	20,84	23,84	26,05	28,25	30,46	19,30	21,51	23,72	27,62	29,94	32,26	34,59
	l	4,10	4,35	4,61	4,86	5,12	5,38	5,63	4,10	4,35	4,61	4,86	5,12	5,38	5,63
400	kg	21,16	24,01	26,86	30,90	33,75	36,60	39,45	24,82	27,67	30,52	35,86	38,83	41,79	44,76
	l	5,46	5,80	6,14	6,49	6,83	7,17	7,51	5,46	5,80	6,14	6,49	6,83	7,17	7,51
500	kg	25,88	29,38	32,87	37,95	41,45	44,94	48,43	30,34	33,84	37,33	44,11	47,72	51,33	54,93
	l	6,83	7,25	7,68	8,11	8,54	8,96	9,39	6,83	7,25	7,68	8,11	8,54	8,96	9,39
600	kg	30,61	34,75	38,89	45,01	49,14	53,28	57,42	35,86	40,00	44,14	52,35	56,60	60,86	65,11
	l	8,19	8,70	9,22	9,73	10,24	10,76	11,27	8,19	8,70	9,22	9,73	10,24	10,76	11,27
700	kg	35,34	40,12	44,90	52,06	56,84	61,63	66,41	41,38	46,16	50,95	60,59	65,49	70,39	75,28
	l	9,56	10,15	10,75	11,35	11,95	12,55	13,15	9,56	10,15	10,75	11,35	11,95	12,55	13,15
800	kg	40,07	45,49	50,92	59,12	64,54	69,97	75,40	46,90	52,33	57,75	68,84	74,38	79,92	85,46
	l	10,92	11,60	12,29	12,97	13,66	14,34	15,02	10,92	11,60	12,29	12,97	13,66	14,34	15,02

Verteo® Plan / Line

Weight, water content

Type 10								Type 20						
Height mm		1200	1400	1600	1800	2000	2200	1200	1400	1600	1800	2000	2200	2400
Length mm	kg	11,48	13,21	14,94	16,67	18,41	20,14	17,91	20,62	23,33	26,05	28,76	31,47	34,18
	l	2,05	2,18	2,30	2,43	2,56	2,69	4,10	4,35	4,61	4,86	5,12	5,38	5,63
300	kg	14,44	16,65	18,87	21,08	23,30	25,52	22,82	26,33	29,85	33,36	36,88	40,39	43,91
	l	2,73	2,90	3,07	3,24	3,41	3,59	5,46	5,80	6,14	6,49	6,83	7,17	7,51
400	kg	17,39	20,09	22,79	25,49	28,19	30,89	27,73	32,04	36,36	40,68	45,00	49,32	53,64
	l	3,41	3,63	3,84	4,05	4,27	4,48	6,83	7,25	7,68	8,11	8,54	8,96	9,39
500	kg	20,35	23,54	26,72	29,90	33,08	36,27	32,63	37,75	42,88	48,00	53,12	58,24	63,37
	l	4,10	4,35	4,61	4,86	5,12	5,38	8,19	8,70	9,22	9,73	10,24	10,76	11,27
600	kg	23,31	26,98	30,64	34,31	37,98	41,64	37,54	43,47	49,39	55,32	61,24	67,17	73,10
	l	4,78	5,08	5,38	5,68	5,97	6,27	9,56	10,15	10,75	11,35	11,95	12,55	13,15
700	kg	26,27	30,42	34,57	38,72	42,87	47,02	42,45	49,18	55,91	62,64	69,36	76,09	82,82
	l	5,46	5,80	6,14	6,49	6,83	7,17	10,92	11,60	12,29	12,97	13,66	14,34	15,02

Type 21									Type 22						
Height mm		1200	1400	1600	1800	2000	2200	2400	1200	1400	1600	1800	2000	2200	2400
Length mm	kg	19,49	22,21	24,92	28,42	31,13	33,84	36,55	22,37	25,08	27,79	32,20	35,03	37,85	40,68
	l	4,10	4,35	4,61	4,86	5,12	5,38	5,63	4,10	4,35	4,61	4,86	5,12	5,38	5,63
300	kg	25,19	28,71	32,22	36,93	40,44	43,96	47,47	28,86	32,37	35,89	41,89	45,52	49,15	52,78
	l	5,46	5,80	6,14	6,49	6,83	7,17	7,51	5,46	5,80	6,14	6,49	6,83	7,17	7,51
400	kg	30,89	35,21	39,53	45,43	49,75	54,07	58,39	35,35	39,67	43,99	51,59	56,02	60,45	64,89
	l	6,83	7,25	7,68	8,11	8,54	8,96	9,39	6,83	7,25	7,68	8,11	8,54	8,96	9,39
500	kg	36,59	41,71	46,84	53,94	59,06	64,18	69,30	41,84	46,96	52,08	61,28	66,52	71,75	76,99
	l	8,19	8,70	9,22	9,73	10,24	10,76	11,27	8,19	8,70	9,22	9,73	10,24	10,76	11,27
600	kg	42,29	48,22	54,14	62,44	68,37	74,29	80,22	48,33	54,26	60,18	70,97	77,01	83,05	89,09
	l	9,56	10,15	10,75	11,35	11,95	12,55	13,15	9,56	10,15	10,75	11,35	11,95	12,55	13,15
700	kg	47,99	54,72	61,45	70,95	77,68	84,41	91,14	54,82	61,55	68,28	80,67	87,51	94,35	101,20
	l	10,92	11,60	12,29	12,97	13,66	14,34	15,02	10,92	11,60	12,29	12,97	13,66	14,34	15,02
800	kg														
	l														

Verteo® Profil

Heat output in watts

Type 10							Type 20							
Height mm	1200	1400	1600	1800	2000	2200	1200	1400	1600	1800	2000	2200	2400	
Length mm	Heat output in watts / room temperature 20 °C													
300	Radiator exponent	1,3148	1,3398	1,3649	1,3899	1,3667	1,3434	1,3753	1,3506	1,3258	1,3328	1,3398	1,3355	1,3311
	watts 75/65 °C	435	496	557	619	681	743	591	679	764	849	932	1014	1094
	70/55 °C	348	395	442	489	540	592	468	540	610	677	742	808	873
	55/45 °C	220	248	275	302	336	371	290	338	385	426	466	508	550
	45/40 °C	152	170	187	204	228	254	197	231	265	293	319	349	378
400	Radiator exponent	1,3068	1,3323	1,3578	1,3833	1,3638	1,3443	1,3634	1,3442	1,3249	1,3315	1,3381	1,3360	1,3339
	watts 75/65 °C	563	642	721	801	881	961	776	890	1003	1113	1222	1329	1435
	70/55 °C	451	512	573	633	699	765	616	708	801	888	974	1059	1144
	55/45 °C	287	322	357	392	435	480	384	444	506	559	612	666	720
	45/40 °C	198	221	244	265	296	328	261	304	348	384	419	457	494
500	Radiator exponent	1,2988	1,3248	1,3507	1,3766	1,3609	1,3452	1,3515	1,3378	1,3240	1,3302	1,3363	1,3365	1,3367
	watts 75/65 °C	687	784	880	977	1075	1174	957	1098	1237	1374	1508	1641	1771
	70/55 °C	551	626	700	773	853	934	761	875	988	1096	1202	1308	1412
	55/45 °C	351	395	438	480	532	586	476	550	624	691	756	822	888
	45/40 °C	243	272	299	325	362	401	325	377	429	474	518	564	608
600	Radiator exponent	1,2909	1,3172	1,3436	1,3700	1,3580	1,3460	1,3396	1,3314	1,3231	1,3288	1,3346	1,3370	1,3395
	watts 75/65 °C	809	922	1036	1150	1265	1381	1137	1304	1469	1631	1791	1948	2104
	70/55 °C	650	737	825	911	1005	1099	906	1040	1174	1302	1428	1553	1676
	55/45 °C	415	467	517	566	627	689	569	655	741	821	899	976	1053
	45/40 °C	288	322	354	385	427	471	390	450	510	564	616	669	721
700	Radiator exponent	1,2829	1,3097	1,3365	1,3633	1,3551	1,3469	1,3277	1,3250	1,3222	1,3275	1,3328	1,3376	1,3423
	watts 75/65 °C	928	1059	1189	1320	1452	1586	1314	1508	1699	1886	2071	2253	2433
	70/55 °C	746	848	948	1047	1154	1262	1049	1204	1358	1506	1652	1795	1937
	55/45 °C	478	538	596	652	721	791	662	760	858	950	1040	1129	1216
	45/40 °C	333	372	409	444	492	540	455	523	590	653	714	773	832
800	Radiator exponent	1,2749	1,3022	1,3294	1,3567	1,3523	1,3478	1,3158	1,3186	1,3213	1,3262	1,3311	1,3381	1,3451
	watts 75/65 °C	1046	1193	1340	1488	1637	1787	1491	1711	1927	2139	2349	2555	2759
	70/55 °C	843	956	1069	1182	1301	1422	1193	1368	1540	1708	1874	2036	2196
	55/45 °C	541	609	674	738	814	890	755	866	973	1078	1181	1279	1377
	45/40 °C	378	421	463	503	555	609	521	596	670	741	811	877	942

Caution: For rooms with interrupted heating mode, a reheating factor, space-dependent where applicable, must be determined according to DIN EN 12831.

$$\Phi_{RH} = A \times f_{RH}$$

The radiators are dimensioned according to these tables with the standard heating load Φ_{HL} determined taking account of the additional heat load (Φ_{RH}). This additional heating output must be agreed with the customer/principal.

Radiator dimensioning: A conversion table with correction factors for deviating design temperatures can be found using the keyword "Radiator dimensioning / correction factors", see page 156/157.

Verteo Profil	Radiation component
Type 10	50 %
Type 20	45 %
Type 21	30 %
Type 22	30 %

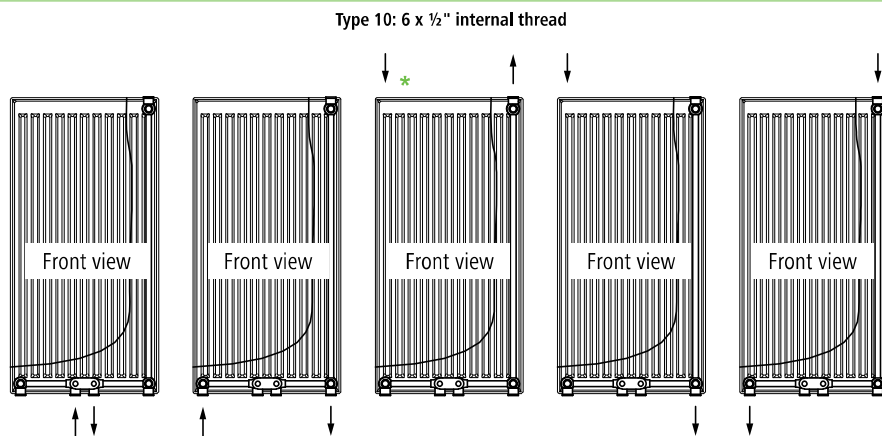


Verteo® Profil / Plan / Line

Connection options / pressure loss

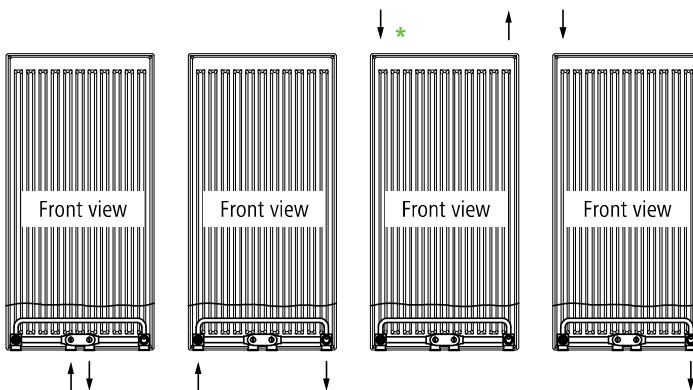
Connection options

Please note: For Verteo type 10 with a connection from the top, we recommend fixing the radiator using wall bracket set long.

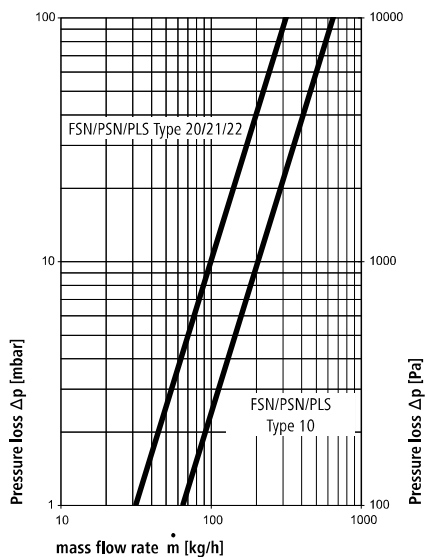


Type 20, 21, 22: 6 x ½" internal thread

*** Please note:** With connection at top
Output reduced by up to 15 %.

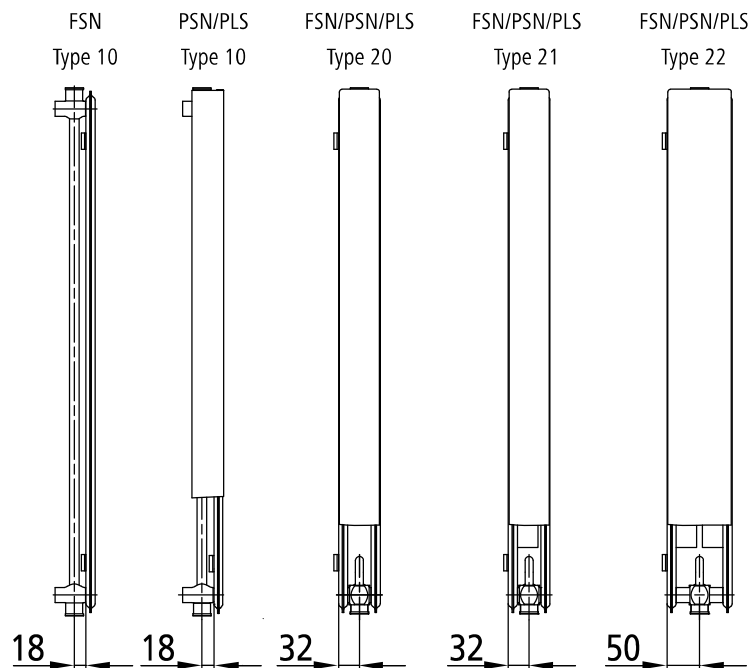
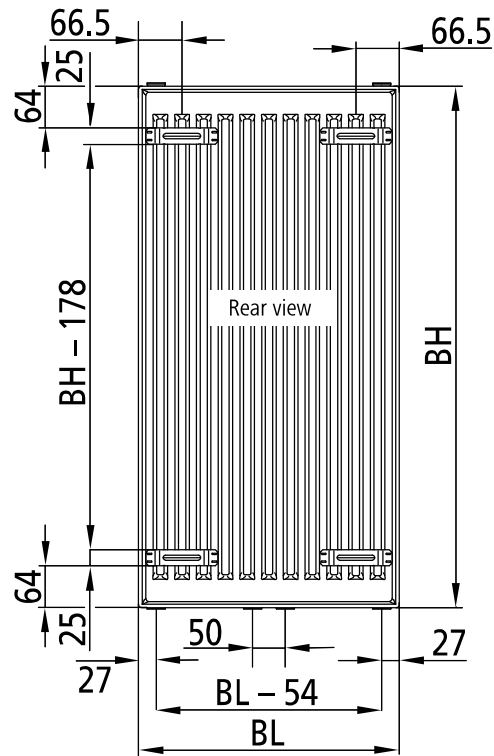


Verteo volume flow rate chart



verleu

for the fixing accessories included in scope of delivery (wall bracket set short).



Verteo® wall fixing

Installation with wall bracket (short)

1. Description

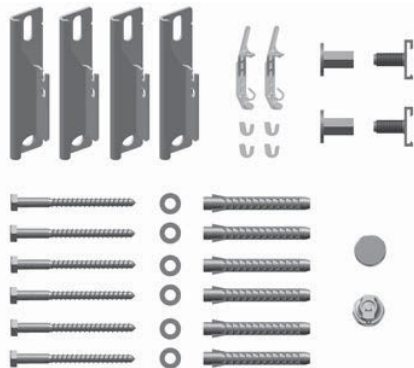
Wall bracket short

Set comprising:

- 4 wall brackets short,
- 6 screws,
- 6 washers,
- 6 dowels,
- 2 spacers,
- 4 sound insulation clips for wall bracket,
- 2 dehinging safety devices,
- 1 air vent plug,
- 1 blanking plugs.

Suitable for requirement classes I, II, and III*.

* Requirement class III is satisfied by the additional use of shift restraints ZK00200001 and ZK00820001 (not for Type 10).



Product codes

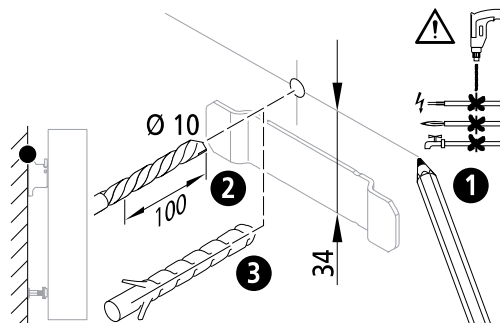
ZB0268 0001 For type 20, 21, 22,
Distance to wall 30 mm

ZB0268 0002 For type 10,
Distance to wall 60 mm

One set required per radiator.

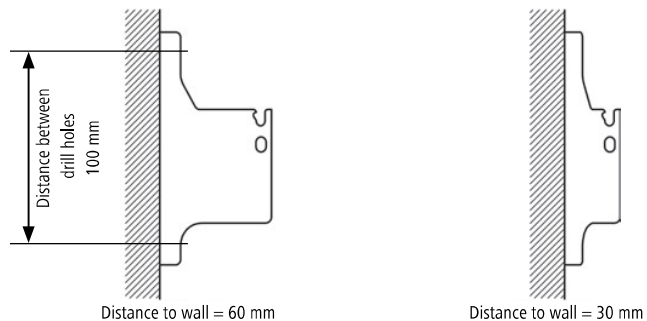
2. Drill hole positioning

- Mark drill holes (connection dimensions and lug positions, see page 69)
- Drill 2 holes with 10 mm Ø
- Insert dowel



Caution! The fastening materials are intended for sufficiently stable substrates. However, the suitable fixing method in each case must always be checked on site and the fixing material must be adjusted to the structural situation!

3. Possible distances to wall



Verteo® wall fixing

Installation with wall bracket (long)

1. Description

Wall bracket long

Set comprising:

- 2 wall brackets,
- 2 dehinging safety devices for wall bracket,
- 3 sound insulation clips.

Set-type	10	11 - 33
Distance to wall in mm	50	30 or 50

Suitable for requirement classes I, II, and III*.

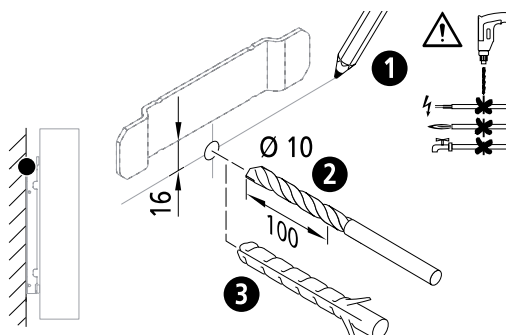
* Requirement class III is satisfied by the additional use of shift restraints ZK00200001 and ZK00820001.



Product codes	
ZB0261 0006	white, height 1200 mm
ZB0261 0007	white, height 1400 mm
ZB0261 0001	white, height 1600 mm
ZB0261 0002	white, height 1800 mm
ZB0261 0003	white, height 2000 mm
ZB0261 0004	white, height 2200 mm
ZB0261 0005	white, height 2400 mm

2. Drill hole positioning

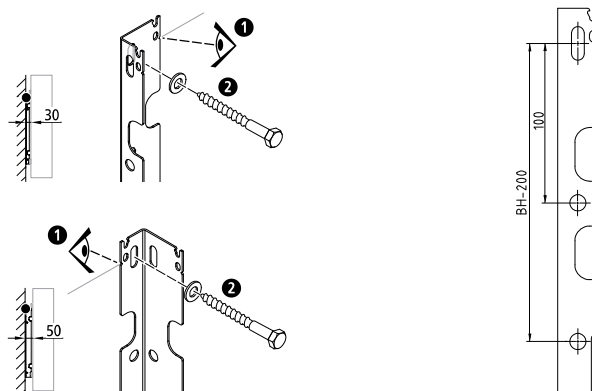
- Mark drill holes (connection dimensions and lug positions, see page 69)
- Drill 2 holes with 10 mm Ø
- Insert dowel



Caution! The fastening materials are intended for sufficiently stable substrates. However, the suitable fixing method in each case must always be checked on site and the fixing material must be adjusted to the structural situation!

3. Distance to wall

- Selecting the distance to wall (30 or 50 mm)



Verteo® floor fixing

Installation with support bracket set

1. Description

Support bracket set

Set comprising:
2 support brackets
2 hooks (with washer and nut)

Matching plastic covers for:
Installation on unfinished floors, product code ZB01190001,
Installation on finished floors, Product code ZB00290001

Please note:

For length = 300 mm, a centre connection is not possible when using the support bracket.

Suitable for requirement classes I, II and III.
Prevent tipping by using short wall bracket (included with radiator).



Use of support bracket

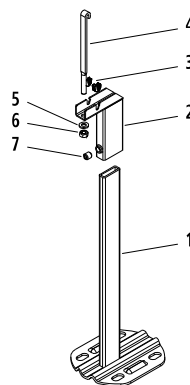
Connection	Length 300	Length 400	Length 500 - 800
Centre connection, pipes out of the wall	With separate flow and return fittings, thermostatic sensor head pointing forwards	With thermostatic sensor head ZV0038... or with wall adapter	✓
Centre connection, pipes out of the floor	With separate flow and return fittings, thermostatic sensor head pointing forwards	With thermostatic sensor head ZV0038... or with wall adapter	✓
Side connection, pipes out of the wall	✓	✓	✓
Side connection, pipes out of the floor	✓	✓	✓

For further information, see installation instructions for support bracket

2. Packaging and scope of delivery

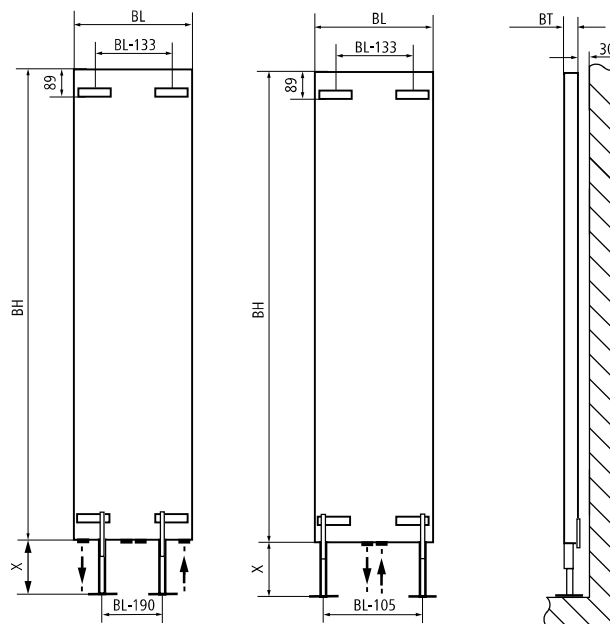
- Check package content of the support bracket for completeness.

Name	Quantity
1 Bracket base 245 mm	2
2 Holder for support bracket	2
3 Sound insulation clip	4
4 Hook for standing bracket	2
5 Washer 6.4 mm	2
6 Hex nut M6	2
7 Grub screw M8 x 8	2



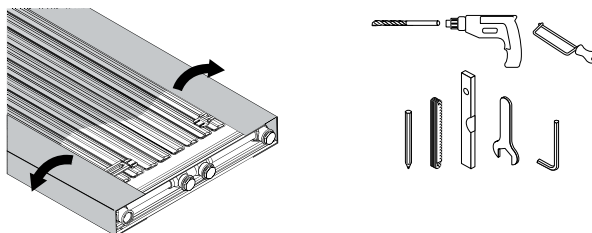
3. Position of radiator lugs and drill holes

	Type 20	Type 21	Type 22	PSS/PSR
Depth (BT)	64/66	64/66	100/102	66
Distance X	110 - 300	110 - 300	110 - 300	110 - 300



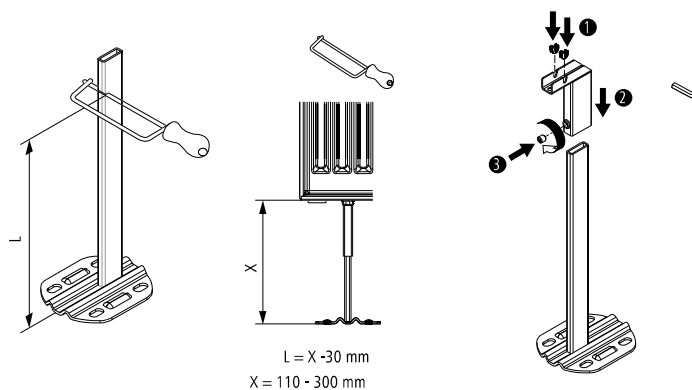
4. Installation brackets

- Get needed tools ready
- Remove the packaging on the base and rear of the radiator around the upper and lower lugs



5. Pre-assembly of the support bracket

- Shorten the support feet (1) to the required length L using the following formula: $L = X - 30 \text{ mm}$ (from $L = 245 \text{ mm}$ no more shortening necessary)
- Mount the sound insulation clips (3) in the recesses provided on the holder (2)
- Slide holder (2) onto the stand bracket base (1)
- Screw the grub screw (7) with two rotations into the designated drill hole in the holder (2)

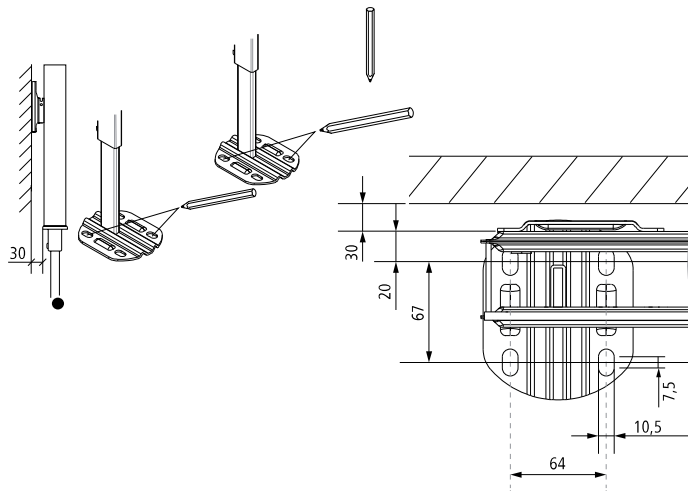


Verteo® floor fixing

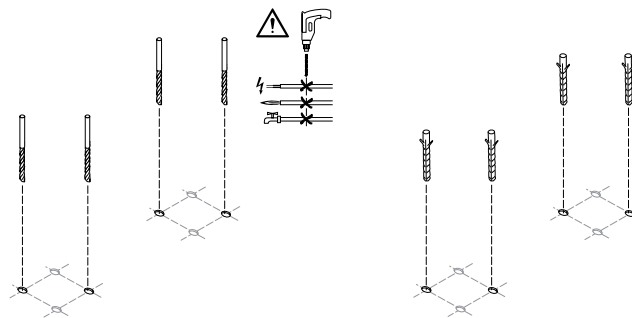
Installation with support bracket set

6. Installing the support bracket without a pre-installed radiator

- Mark the distance between the drill holes for fixing the support bracket (see also 3. Position of radiator lugs and drill holes)

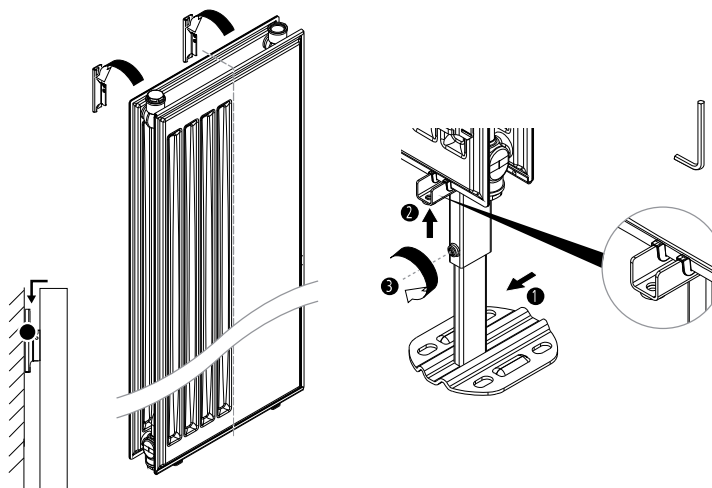


- Drill holes and attach suitable dowels

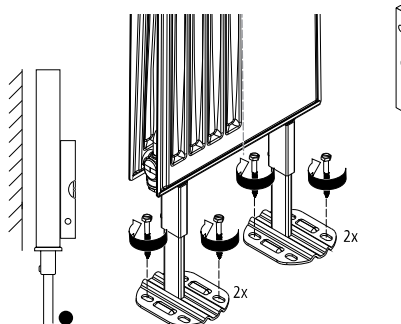


Caution! The fastening materials are intended for sufficiently stable substrates. However, the appropriate fastening method must always be checked on site and the fastening materials adapted to the structural situation!

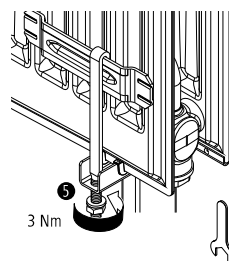
- Install the radiator according to this diagram
- Slide the pre-installed support bracket into the lower part of the radiator by the lugs and secure it with the grub screw (7). The sound insulation clips (3) are placed on the bottom edge of the radiator.



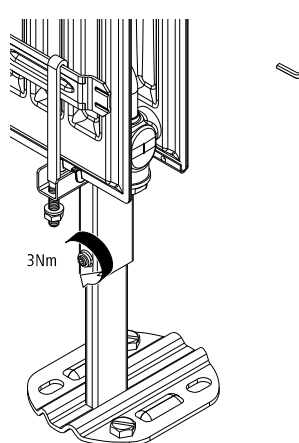
- Place the support brackets on the drill holes, align them, and secure them to the floor with suitable screws (2 screws per bracket)



- Insert the hook (4) through the slot on the holder (2) and hook it into the lower lug on the radiator. Screw together with the hex nut (6) and the washer (7) and tighten with 3 Nm



- Then re-tighten the threaded screw (7) with 3 Nm



Technical information - Kermi steel panel radiators

For Verteo technical information, see page 68 - 75.