PRICE INCREASE AS OF 1.1.2023
ON: „PRICES AND TECHNOLOGY 2021-N“

46,54 % on column radiators
11,9 % as of 1.8.2021 | 8,9 % as of 1.1.2022
15,9 % as of 1.6.2022 | 3,75 % as of 1.1.2023

50,18 % on accessories
7,9 % as of 1.8.2021 | 6,9 % as of 1.1.2022
24,0 % as of 1.6.2022 | 5,0 % as of 1.1.2023

arbonia

COLUMN RADIATORS.
PRICES AND TECHNOLOGY 2021-N

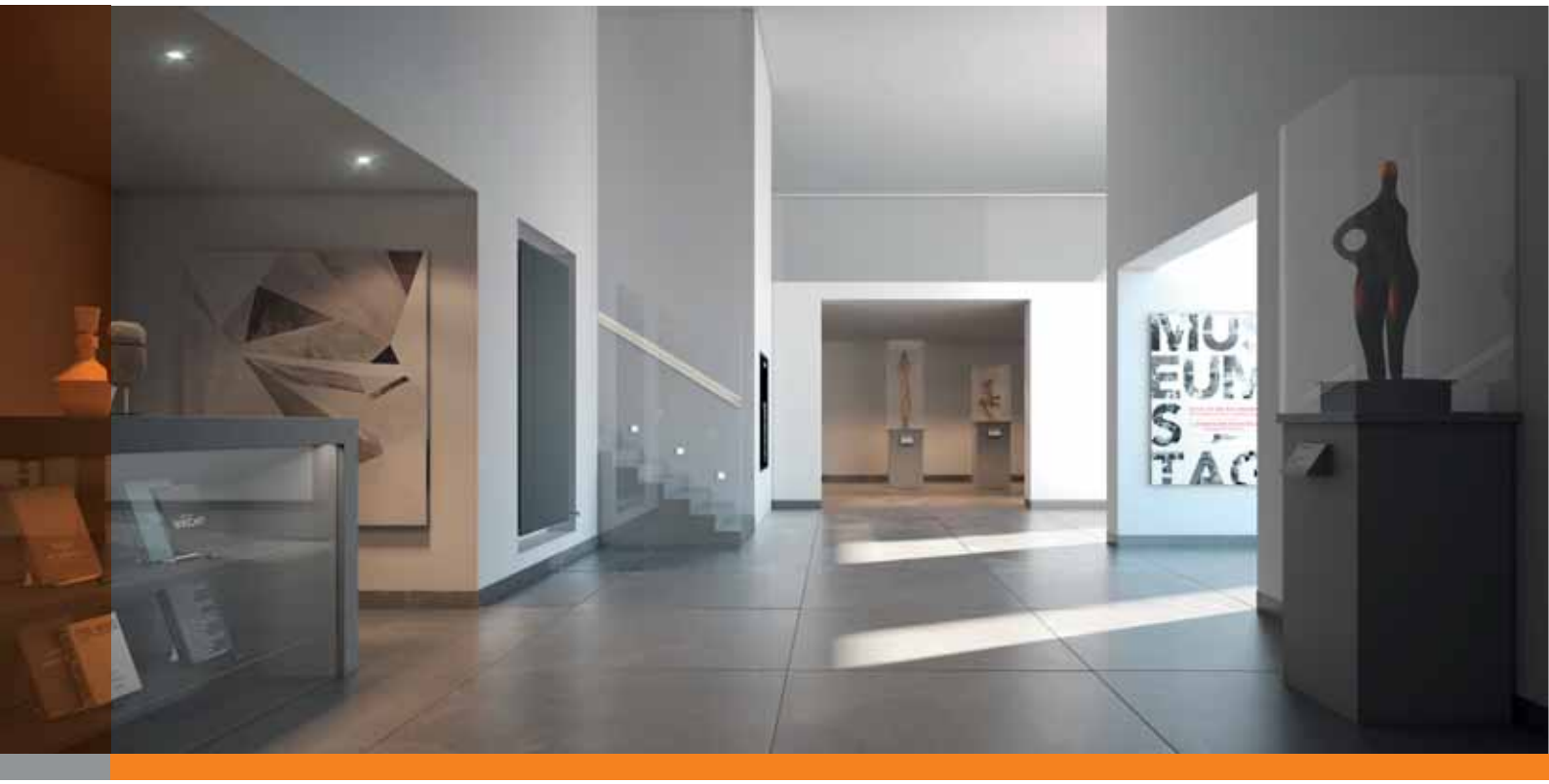
Heating. Cooling. Ventilation.

right to the point

HOW TO PROVIDE QUALITY RIGHT TO THE POINT?

More than 60 years ago, the founders of Arbonia had one aim in mind: providing human beings with "warming" solutions. But today our aim is much broader. Arbonia is a brand for heating solutions and fulfils the highest expectations for public and commercial buildings. But we still adhere to our founders' high standards: customer support and solutions that are right to the point. What does that mean in practical terms? That's simple: We adhere to delivery and scheduling arrangements down to the smallest detail. High-quality packaging is only the first aspect of the Arbonia standard of quality. Our products' build quality and long service life have ensured customer satisfaction for years now and conform to the strict requirements of the applicable guidelines and standards. Individual customer service and the greatest possible flexibility of form and colour design are a matter of course for us. A string of awards demonstrates our design expertise. We at Arbonia continue to add our passion to all of our development efforts – to provide the right room temperature solution for you.

right to the point



Flexible and safe:
the most important applications
of our column radiators

Wall

GENERAL INFORMATION

MODELS

ARBONIA INDIVIDUAL

FIXING AND DIMENSIONAL DRAWINGS

ACCESSORIES

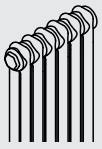
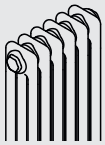
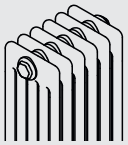
FURTHER INFORMATION

ARBONIA COLUMN RADIATORS:
GENERAL INFORMATION

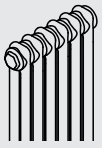
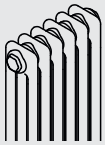
In the following section, you will find:

- Model overview
- Order with completely configured order number

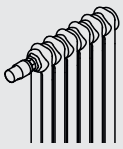
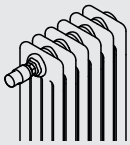
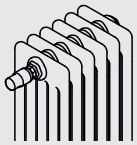
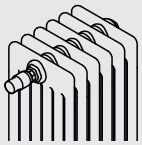
MODEL OVERVIEW OF STANDARD COLUMN RADIATORS

			....		
Type Standard without built-in valve	2...	3...	4...	5...	6...
					
Depth	65 mm	105 mm	145 mm	185 mm	225 mm
Number of columns	2	3	4	5	6
Length	270–2970 mm [1]				
Height	180–3000 mm				
Explanation of version code	2 : 2 columns	3 : 3 columns	4 : 4 columns	5 : 5 columns	6 : 6 columns
	... : height in cm	... : height in cm	... : height in cm	... : height in cm	... : height in cm
Example		2050	2 : 2 columns		
			050 : height 50 cm		

MODEL OVERVIEW OF CAMBIOTHERM

			....		
Type Standard without built-in valve	2...	3...	4...	5...	6...
					
Depth	65 mm	105 mm	145 mm	185 mm	225 mm
Number of columns	2	3	4	5	6
Length	270–2970 mm [1]				
Height	270–1070 mm				
Explanation of version code	2 : 2 columns	3 : 3 columns	4 : 4 columns	5 : 5 columns	6 : 6 columns
	... : height in cm	... : height in cm	... : height in cm	... : height in cm	... : height in cm
Example		2097	2 : 2 columns		
			097 : height 97 cm		

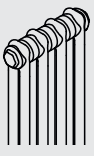
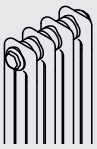
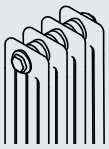
MODEL OVERVIEW OF STANDARD COLUMN RADIATORS WITH BUILT-IN VALVE

			V		
Type Standard with built-in valve	2...V	3...V	4...V	5...V	6...V
					
Depth	65 mm	105 mm	145 mm	185 mm	225 mm
Number of columns	2	3	4	5	6
Length	270–2970 mm [1]				
Height	180–3000 mm				
Explanation of version code	2 : 2 columns	3 : 3 columns	4 : 4 columns	5 : 5 columns	6 : 6 columns
	... : height in cm	... : height in cm	... : height in cm	... : height in cm	... : height in cm
	V : with factory k_v-preset built-in valve	V : with factory k_v-preset built-in valve	V : with factory k_v-preset built-in valve	V : with factory k_v-preset built-in valve	V : with factory k_v-preset built-in valve
Example		2050	2 : 2 columns		
			050 : height 50 cm		
			V : with factory k_v-preset built-in valve		

[1] The specifications refer to the maximum length of the first block.

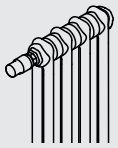
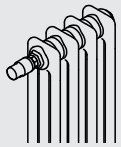
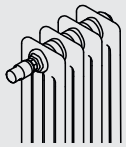
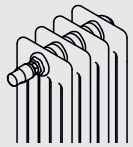
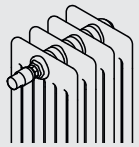
MODEL OVERVIEW OF SANO RADIATORS

M....

Type	M2...	M3...	M4...	M5...	M6...
Standard without built-in valve					
Depth	65 mm	105 mm	145 mm	185 mm	225 mm
Number of columns	2	3	4	5	6
Length	370–2970 mm [1]				
Height	260–3000 mm				
Explanation of version code	M : Sano radiator	M : Sano radiator	M : Sano radiator	M : Sano radiator	M : Sano radiator
	2 : 2 columns	3 : 3 columns	4 : 4 columns	5 : 5 columns	6 : 6 columns
	... : height in cm	... : height in cm	... : height in cm	... : height in cm	... : height in cm
Example	M2026	M : Sano radiator			
		2 : 2 columns			
		026 : height 26 cm			

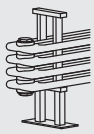
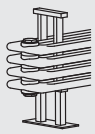
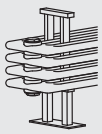
MODEL OVERVIEW OF SANO RADIATORS WITH BUILT-IN VALVE

M....V

Type	M2...V	M3...V	M4...V	M5...V	M6...V
Standard with built-in valve					
Depth	65 mm	105 mm	145 mm	185 mm	225 mm
Number of columns	2	3	4	5	6
Length	370–2970 mm [1]				
Height	260–3000 mm				
Explanation of version code	M : Sano radiator	M : Sano radiator	M : Sano radiator	M : Sano radiator	M : Sano radiator
	2 : 2 columns	3 : 3 columns	4 : 4 columns	5 : 5 columns	6 : 6 columns
	... : height in cm	... : height in cm	... : height in cm	... : height in cm	... : height in cm
	V : with factory k_v-preset built-in valve				
Example	M2026	M : Sano radiator			
		2 : 2 columns			
		026 : height 26 cm			

MODEL OVERVIEW OF BENCH RADIATORS

.F.....

Type	.F4...	.F5...	.F6...
Standard with built-in valve			
Depth	145 mm	185 mm	145 mm
Length	1200–3000 mm		
Height	180–315 mm		
Explanation of version code	. : number of elements (4–7), corresponds to height	. : number of elements (4–7), corresponds to height	. : number of elements (4–7), corresponds to height
	F4 : bench radiator with 4 columns	F5 : bench radiator with 5 columns	F6 : bench radiator with 6 columns
	... : length in cm	... : length in cm	... : length in cm
Example	6F4150	6 : 6 elements, height = 250 mm	
		F4 : 4 columns, depth = 145 mm	
		150 : 150 cm length	

[1] The specifications refer to the maximum length of the first block.

ORDER WITH COMPLETELY CONFIGURED ORDER NUMBER

Arbonia column radiators can be ordered in 2 universal variants (without built-in valve / with built-in valve) with a wide range of sizes. These are completely configured order items that offer various installation options on site. The individual technical ordering parameters are already predefined here. This makes it possible to order the column radiators faster and more conveniently.

This concerns the model types standard column radiator and Cambiotherm replacement radiator.

The order number system and product range are explained below.

EXPLANATION OF THE ORDER NUMBER SYSTEM

R R . . . . 2 . X A = Arbonia

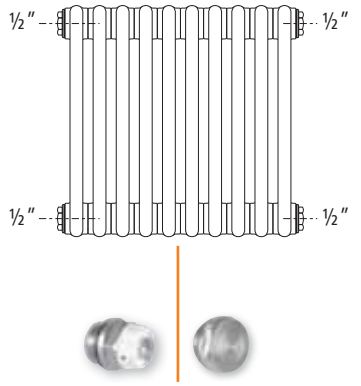
Model	Version	Type	Height	Length	Colour	Connection system	Fixing
RR = Arbonia column radiator	N = standard without built-in valve	20 = 2 columns	018 = 180 mm	006 = 6 elements	2 = RAL 9016	2 = without built-in valve (connection system 2-pipe; connections 4 x ½"; air vent and blanking plug enclosed)	X = without fixing
	V = standard with built-in valve	30 = 3 columns	019 = 190 mm	007 = 7 elements		6 = with built-in valve M30 x 1.5 (connection system 31; Connections bottom centre 2 x ½" with hub distance 50 mm; air vent built-in)	
		40 = 4 columns	026 = 260 mm	...			
		50 = 5 columns	027 = 270 mm	066 = 66 elements			
		60 = 6 columns	030 = 300 mm				
			035 = 350 mm				
			037 = 370 mm				
			040 = 400 mm				
			042 = 420 mm				
			045 = 450 mm				
			050 = 500 mm				
			055 = 550 mm				
			057 = 570 mm				
			060 = 600 mm				
			067 = 670 mm				
			075 = 750 mm				
			090 = 900 mm				
			097 = 970 mm				
			100 = 1000 mm				
			107 = 1070 mm				
			110 = 1100 mm				
			120 = 1200 mm				
			150 = 1500 mm				
			180 = 1800 mm				
			200 = 2000 mm				
			220 = 2200 mm				
			250 = 2500 mm				
			280 = 2800 mm				
			300 = 3000 mm				

EXAMPLE: RRN 20 030 006 2 2 X A

Arbonia column radiator; standard without built-in valve; 2-column type; height 300 mm; length 6 elements; colour RAL 9016 white; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; air vent and blanking plug are enclosed.

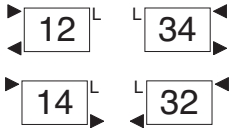
OVERVIEW OF UNIVERSAL VARIANTS AND CONNECTION TYPES

Variant 1 column radiators without built-in valve



Air vent and blanking plug for draining are enclosed

Possible connection variants



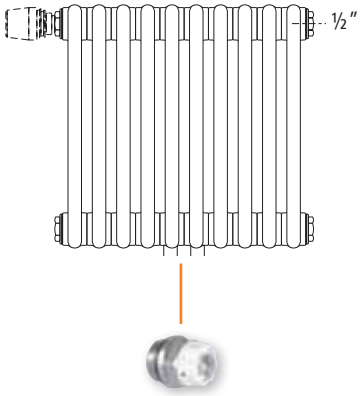
Code for the order number at position 13

R	R	.	.	.	.	.	.	.	.	.	.	2	X	A

Description

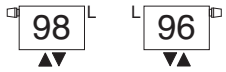
- Universal solution for 4 different connection types (2 on same side and 2 on alternating sides)
- 2-pipe connection with 4 x ½″ connections
- The connection image can be changed on site by the individual installation of air vent and blanking plug
- Connection size: ½″ internal thread
- Air vent ZT0009 0001 and blanking plug ZT0008 0001 are enclosed
- Fixing accessories are not included in the scope of delivery and must be ordered as accessories

Version 2 column radiators with built-in valve



Air vent installed

Possible connection variants



Code for the order number at position 13

R	R	.	.	.	.	.	.	.	.	.	.	6	X	A

Description

- Factory k_v-preset built-in valve arranged at the top on the side
- Standard valve insert with M30 x 1.5 connection
- 2-pipe connection at bottom centre with 50 mm hub distance
- On site, the connection image can be changed by turning the radiator by 180° (96 <-> 98)
- Connection size: ½″ internal thread
- Air vent ZT0009 0001 is installed on site
- Fixing accessories and thermostatic sensor head are not included in the scope of delivery and must be ordered as accessories

SIZE RANGE OF ARBONIA COLUMN RADIATORS WITH ORDER NUMBER

The column radiators with an order number are only available up to a maximum number of elements in one block. The restrictions are defined as follows:

Models	Height [mm]	max. elements first block	Length [mm]
2-column	190–2000	66	2970
	2200–3000	42	1890
3-column	190–1800	66	2970
	2000–2200	59	2655
	2500–3000	30	1350
4-column	190–1200	66	2970
	1500–1800	54	2430
	2000–2200	44	1980
	2500–3000	30	1350
5-column	180–1000	66	2970
	1100–1200	44	1980
	1500–2500	30	1350
	2800–3000	26	1170
6-column	180–900	66	2970
	1000	58	2610
	1100–1200	44	1980
	1500–2000	30	1350
	2200–3000	22	990

A delivery in several blocks/parts with order number is not possible. However, these can still be ordered unconfigured in the usual way.

⋈ In addition to the size restrictions, the valve performance limits must be observed for the version with built-in valve RRV. These are marked with this symbol in the price list.

ARBONIA COLUMN RADIATORS:
STANDARD COLUMN RADIATORS

In the following section, you will find:

- General, tender specifications
- Description
- Technical data
- Prices and outputs
- Connection options and dimensional drawing
- Air vent and drain

COLUMN RADIATORS

The customised compact radiator. You have made a good choice when you decide to install Arbonia column radiators. These beautiful, top quality, state-of-the-art products provide the comfort that a discerning developer expects: More comfort thanks to the ideal distribution of the heat through radiation and convection, more options thanks to the wide range of radiator dimensions available, but also more safety (complies with statutory accident insurance conditions), as they have no corners or sharp edges.

This is a valuable advantage, particularly in children's bedrooms or in schools. Arbonia column radiators are also greatly appreciated in homes, public buildings, institutions, etc. because they are very easy to clean.

Special features:

- A classic and timeless design
- Top in quality and comfort
- A uniquely large variety of models
- Powerful and comfortable
- High accident safety (compliant with statutory accident insurance)
- Safe and easy to install in accordance with VDI 6036

TENDER SPECIFICATIONS

Arbonia standard column radiators

2–6 columns made of steel; individual elements (length 45 mm) as a welded assembly, consisting of head pieces (band steel pressings) and round precision steel pipes. Blocks welded together from elements up to the maximum length of the delivery unit.

Ready to install with 4 threaded plugs for flow and return as well as for air vent and drain. Edges rounded on all sides with R_{min} = 2 mm.

Coating according to DIN 55900 part 1 and part 2.

Design features comply with the basic principles for the testing of the occupational safety of radiators (statutory accident insurance).

Awarded for compliance with demanding hygiene requirements by a laboratory for microbiology and hygiene.

Pressure and leak tested.

Heat output tested and registered in accordance with EN 442.

Awarded with the RAL quality mark.

CE-compliant.

Suitable for closed water heating systems in accordance with DIN 18380 and water quality in accordance with VDI 2035, ÖNORM H5195 and SWKI BT 102-01.

Maximum permissible operating temperature: 110 °C

Max. operating pressure:

2–6 columns 10 bar / 1000 kPa

2–6 columns 16 bar / 1600 kPa (high-pressure version)

Packed safely for transport.

RANGE AVAILABLE

- 5 depths: 65–225 mm (2–6 columns)
- 21 heights: 180–3000 mm
- Length:
  - Calculation: number of elements x 45 mm
  - Length gradation: 45 mm (1 element)
  - Minimum length: 270 mm (6 elements)
  - Maximum length per block: 450–2970 mm (depending on depth and height)
  - Maximum total length: 3 blocks (to be coupled on site, high-pressure version: 1 block)
- 2-pipe connections, at side
- Can be installed as a bench

For column radiators with connections on the same side, starting from a certain length and height, an insert pipe will also be supplied at an extra charge in order to guarantee proper water circulation.

MAXIMUM LENGTH

For reasons of weight and transport, column radiators can only be shipped from the factory as a single piece up to a maximum length. If the maximum length is exceeded in a single piece, then the column radiators will be delivered in several blocks (see price tables).

These blocks will have to be coupled together on site, or if necessary at the factory. The overall length for column radiators is limited to three blocks.

Column radiators in the high-pressure version cannot be coupled. The overall length for the high-pressure version is thus limited to the maximum number of elements per block.

COLUMN RADIATORS

The customised compact radiator. You have made a good choice when you decide to install Arbonia column radiators. These beautiful, top quality, state-of-the-art products provide the comfort that a discerning developer expects: More comfort thanks to the ideal distribution of the heat through radiation and convection, more options thanks to the wide range of radiator dimensions available, but also more safety (complies with statutory accident insurance conditions), as they have no corners or sharp edges.

This is a valuable advantage, particularly in children's bedrooms or in schools. Arbonia column radiators are also greatly appreciated in homes, public buildings, institutions, etc. because they are very easy to clean.

Special features:

- Increased efficiency thanks to preset valves
- A classic and timeless design
- Top in quality and comfort
- A uniquely large variety of models
- Powerful and comfortable
- High accident safety (compliant with statutory accident insurance)
- Safe and easy to install in accordance with VDI 6036

TENDER SPECIFICATIONS

Arbonia standard column radiators with built-in valve

2–6 columns made of steel; individual elements (length 45 mm) as a welded assembly, consisting of head pieces (band steel pressings) and round precision steel pipes. Blocks welded together from elements up to the maximum length of the delivery unit.

With integrated, adjustable valve insert. The kv_value is preset at the factory and adjusted to the heat output.

Ready to install with connections for flow and return as well as for air vent. Connection for drain optional. Edges rounded on all sides with R_{min} = 2 mm.

Coating according to DIN 55900 part 1 and part 2.

Design features comply with the basic principles for the testing of the occupational safety of radiators (statutory accident insurance).

Awarded for compliance with demanding hygiene requirements by a laboratory for microbiology and hygiene.

Pressure and leak tested.

Heat output tested and registered in accordance with EN 442.

Awarded with the RAL quality mark.

CE-compliant.

Suitable for closed water heating systems in accordance with DIN 18380 and water quality in accordance with VDI 2035, ÖNORM H5195 and SWKI BT 102-01.

Maximum permissible operating temperature: 110 °C

Max. operating pressure:

2–6 columns 10 bar / 1000 kPa

Packed safely for transport.

RANGE AVAILABLE

- 5 depths: 65–225 mm (2–6 columns)
- 21 heights: 180–3000 mm
- Length:
  - Calculation: number of elements x 45 mm
  - Length gradation: 45 mm (1 element)
  - Minimum length: 270 mm (6 elements)
  - Maximum length see paragraph "Maximum length"
- Can be installed as a bench
- Factory kv-preset built-in valve, arranged at top or bottom, right or left
- Standard connection:
  - 2-pipe connection at bottom or top, on same side (on the side of the valve) with hub distance 50 mm
  - Connection size: G ½" internal thread
  - Flow welded into the 1st element, return into the 2nd element
  - For the version with valve arranged at the bottom, two air vents are provided
- Thermostatic sensor head is not included in the scope of delivery and must be ordered as an accessory
- Not available in high-pressure version

MAXIMUM LENGTH

For reasons of weight and transport, column radiators can only be shipped from the factory as a single piece up to a maximum length. If the maximum length is exceeded in a single piece, the column radiators will be delivered in several blocks. (see price tables)

These blocks will have to be coupled together on site, or if necessary at the factory. The overall length for column radiators is limited to three blocks.

Column radiators in the high-pressure version cannot be coupled. The overall length for the high-pressure version is thus limited to the maximum number of elements per block.

TECHNICAL DATA AND PRICE PER ELEMENT – HEIGHT 180–500 MM

Height H	Depth T		Heat output EN 442				Exponent n	Ø Mass per element M	Surface per element A	Water content per element W	Standard water flow q_m	Radiation component s	Price per element
			Φ ΔT 60 K 90/70/20 °C	**$Φ_L$ ΔT 50 K 75/65/20 °C**	Φ ΔT 42 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C							
C	C	Model	[watt/el.]	**[watt/el.]**	[watt/el.]	[watt/el.]	[ ]	[kg/el.]	[m²/el.]	[l/el.]	[kg/h el.]	[%]	[EUR/el.]
180	185	5018	40	**32**	26	16	1.29	0.89	0.08	0.62	2.5	30	39.94
	225	6018	49	**39**	31	20	1.31	1.08	0.10	0.74	2.8	27	46.21
190	65	2019	18	**15**	12	8	1.23	0.33	0.03	0.28	1.2	49	26.68
	105	3019	25	**20**	16	11	1.27	0.50	0.05	0.40	1.7	38	28.49
	145	4019	33	**27**	22	14	1.25	0.66	0.07	0.52	2.2	33	32.26
260	65	2026	25	**20**	16	11	1.25	0.42	0.04	0.34	1.6	49	27.44
	105	3026	35	**28**	22	14	1.31	0.63	0.07	0.48	2.2	38	29.50
	145	4026	46	**36**	29	19	1.30	0.84	0.09	0.63	2.8	33	32.93
	185	5026	56	**45**	36	22	1.33	1.11	0.11	0.78	3.6	30	40.11
	225	6026	67	**53**	42	26	1.36	1.34	0.13	0.93	4.0	27	46.74
300	65	2030	30	**24**	19	12	1.26	0.47	0.05	0.37	1.9	49	27.92
	105	3030	41	**33**	26	16	1.33	0.70	0.08	0.53	2.7	38	30.31
	145	4030	54	**43**	34	21	1.33	0.93	0.10	0.69	3.4	33	33.52
	185	5030	67	**53**	42	26	1.36	1.23	0.13	0.86	4.1	30	40.05
	225	6030	79	**62**	49	30	1.39	1.49	0.15	1.02	4.9	27	46.79
350	65	2035	35	**28**	22	14	1.31	0.53	0.06	0.41	2.2	49	28.45
	105	3035	48	**38**	30	19	1.36	0.79	0.09	0.59	3.1	38	31.19
	145	4035	63	**49**	39	25	1.35	1.06	0.12	0.77	4.0	33	34.69
	185	5035	78	**61**	48	30	1.39	1.38	0.15	0.96	4.8	30	40.86
	225	6035	92	**72**	56	34	1.41	1.67	0.18	1.14	5.7	27	48.10
400	65	2040	40	**31**	25	16	1.31	0.59	0.07	0.45	2.4	49	28.71
	105	3040	55	**43**	34	21	1.36	0.88	0.10	0.65	3.5	38	32.26
	145	4040	71	**56**	44	28	1.35	1.18	0.13	0.85	4.5	33	35.37
	185	5040	88	**69**	55	34	1.39	1.53	0.17	1.06	5.5	30	42.13
	225	6040	104	**81**	64	39	1.41	1.85	0.20	1.26	6.5	27	49.58
450	65	2045	44	**35**	28	18	1.31	0.65	0.07	0.49	2.8	49	29.47
	105	3045	61	**48**	38	24	1.36	0.97	0.11	0.71	4.0	38	33.05
	145	4045	79	**62**	50	31	1.35	1.30	0.15	0.93	5.0	33	36.85
	185	5045	98	**77**	61	37	1.39	1.68	0.19	1.16	6.2	30	44.03
	225	6045	115	**90**	71	43	1.41	2.03	0.22	1.38	7.2	27	51.43
500	65	2050	49	**39**	31	20	1.31	0.71	0.08	0.53	3.2	49	30.27
	105	3050	68	**53**	42	26	1.36	1.06	0.12	0.77	4.4	38	34.07
	145	4050	87	**69**	55	34	1.35	1.42	0.17	1.01	5.6	33	37.95
	185	5050	108	**85**	67	41	1.39	1.83	0.21	1.26	6.9	30	44.87
	225	6050	127	**99**	78	48	1.41	2.21	0.25	1.50	8.1	27	52.79

TECHNICAL DATA AND PRICE PER ELEMENT – HEIGHT 550–1200 MM

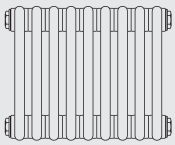
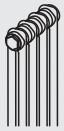
Height H	Depth T		Heat output EN 442				Exponent n	Ø Mass per element M	Surface element A	Water content W	Standard water flow q_m	Radiation component s	Price per element
			Φ ΔT 60 K 90/70/20 °C	**$Φ_L$ ΔT 50 K 75/65/20 °C**	Φ ΔT 42 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C		per element	per element	per element			
C	C	Model	[watt/el.]	**[watt/el.]**	[watt/el.]	[watt/el.]	[ ]	[kg/el.]	[m²/el.]	[l/el.]	[kg/h el.]	[%]	[EUR/el.]
	65	2055	53	**42**	34	21	1.31	0.77	0.09	0.57	3.5	49	30.77
	105	3055	74	**58**	46	29	1.36	1.16	0.14	0.83	4.7	38	35.06
550	145	4055	95	**75**	60	37	1.35	1.54	0.18	1.09	6.1	33	39.58
	185	5055	118	**93**	73	45	1.39	1.99	0.23	1.36	7.5	30	46.50
	225	6055	138	**108**	85	52	1.41	2.40	0.27	1.62	8.9	27	55.27
	65	2060	58	**46**	37	23	1.31	0.83	0.10	0.61	3.8	49	31.68
	105	3060	80	**63**	50	31	1.36	1.25	0.15	0.89	5.2	38	36.17
600	145	4060	103	**81**	64	40	1.35	1.66	0.20	1.17	6.6	33	40.95
	185	5060	128	**100**	79	49	1.39	2.14	0.25	1.45	8.2	30	48.60
	225	6060	150	**117**	92	56	1.41	2.58	0.29	1.74	9.7	27	57.31
	65	2075	71	**57**	45	29	1.31	1.02	0.12	0.73	4.7	49	32.99
	105	3075	99	**78**	62	39	1.36	1.52	0.18	1.07	6.5	38	38.80
750	145	4075	126	**100**	79	50	1.35	2.03	0.24	1.41	8.2	33	46.50
	185	5075	157	**123**	97	60	1.39	2.59	0.30	1.75	10.1	30	55.94
	225	6075	183	**143**	113	69	1.40	3.12	0.37	2.10	11.8	27	65.31
	65	2090	84	**67**	54	34	1.31	1.20	0.15	0.84	5.8	49	35.15
	105	3090	117	**92**	73	46	1.36	1.79	0.22	1.25	7.7	38	41.77
900	145	4090	148	**117**	93	58	1.35	2.39	0.29	1.65	9.6	33	53.62
	185	5090	184	**144**	114	70	1.39	3.05	0.36	2.05	11.9	30	63.46
	225	6090	215	**168**	132	81	1.40	3.67	0.44	2.45	14.0	27	73.46
	65	2100	93	**74**	59	37	1.32	1.32	0.16	0.92	6.3	49	36.76
	105	3100	130	**102**	81	51	1.36	1.98	0.24	1.37	8.4	38	43.80
1000	145	4100	164	**129**	103	64	1.35	2.63	0.32	1.81	10.7	33	57.93
	185	5100	202	**158**	125	77	1.38	3.35	0.40	2.25	13.0	30	67.65
	225	6100	237	**185**	146	90	1.40	4.03	0.48	2.69	15.5	27	79.20
	65	2110	102	**81**	65	41	1.32	1.44	0.18	1.00	6.9	49	38.20
	105	3110	141	**111**	88	55	1.35	2.16	0.27	1.49	9.2	38	49.16
1100	145	4110	179	**141**	112	70	1.35	2.88	0.35	1.97	11.6	33	64.02
	185	5110	219	**172**	136	84	1.38	3.65	0.44	2.45	14.2	30	78.49
	225	6110	257	**201**	158	97	1.40	4.40	0.53	2.93	16.9	27	93.39
	65	2120	111	**88**	70	44	1.32	1.56	0.19	1.08	7.4	49	40.78
	105	3120	152	**120**	95	60	1.35	2.34	0.29	1.60	10.0	38	57.48
1200	145	4120	193	**152**	121	76	1.35	3.12	0.38	2.13	12.6	33	72.32
	185	5120	237	**186**	147	91	1.38	3.96	0.48	2.65	15.4	30	90.83
	225	6120	278	**217**	171	105	1.40	4.76	0.58	3.17	18.0	27	105.81

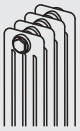
TECHNICAL DATA AND PRICE PER ELEMENT – HEIGHT 1500–3000 MM

Height H	Depth T		Heat output EN 442				Exponent n	Ø Mass per element M	Surface per element A	Water content per element W	Standard water flow q_m	Radiation component s	Price per element
			Φ ΔT 60 K 90/70/20 °C	**$Φ_L$ ΔT 50 K 75/65/20 °C**	Φ ΔT 42 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C							
C	C	Model	[watt/el.]	**[watt/el.]**	[watt/el.]	[watt/el.]	[ ]	[kg/el.]	[m²/el.]	[l/el.]	[kg/h el.]	[%]	[EUR/el.]
	65	2150	138	**109**	87	55	1.32	1.93	0.24	1.32	9.1	49	52.17
	105	3150	187	**147**	117	73	1.35	2.89	0.36	1.96	12.3	38	74.56
1500	145	4150	236	**186**	148	93	1.35	3.85	0.48	2.60	15.5	33	97.43
	185	5150	286	**225**	178	111	1.37	4.87	0.60	3.24	18.5	30	122.00
	225	6150	338	**264**	208	128	1.40	5.85	0.72	3.88	21.5	27	145.34
	65	2180	164	**130**	104	66	1.32	2.29	0.29	1.56	10.8	49	61.66
	105	3180	219	**173**	138	86	1.35	3.43	0.43	2.32	14.6	38	91.97
1800	145	4180	277	**219**	174	110	1.34	4.58	0.57	3.08	18.4	33	117.06
	185	5180	335	**263**	208	130	1.37	5.78	0.72	3.84	22.0	30	143.52
	225	6180	395	**309**	244	151	1.39	6.95	0.86	4.60	25.5	27	170.44
	65	2200	182	**144**	115	73	1.32	2.53	0.32	1.72	12.0	49	69.01
	105	3200	241	**190**	151	95	1.34	3.80	0.48	2.56	16.3	38	98.56
2000	145	4200	305	**241**	192	121	1.34	5.06	0.64	3.40	20.4	33	129.66
	185	5200	365	**287**	227	141	1.37	6.38	0.80	4.24	24.3	30	158.69
	225	6200	433	**339**	268	165	1.39	7.67	0.95	5.08	28.4	27	187.94
	65	2220	199	**158**	126	80	1.32	2.78	0.35	1.88	13.2	49	77.45
	105	3220	262	**207**	165	104	1.34	4.16	0.52	2.80	17.9	38	112.23
2200	145	4220	332	**262**	209	131	1.34	5.55	0.70	3.72	22.4	33	145.69
	185	5220	394	**310**	246	153	1.36	6.99	0.87	4.64	26.5	30	178.43
	225	6220	469	**367**	290	179	1.39	8.40	1.05	5.55	31.0	27	211.70
	65	2250	226	**179**	143	90	1.32	3.14	0.40	2.12	15.0	49	85.88
	105	3250	293	**231**	184	116	1.34	4.71	0.59	3.16	20.3	38	125.89
2500	145	4250	371	**293**	233	147	1.34	6.27	0.79	4.19	25.4	33	161.92
	185	5250	436	**343**	272	170	1.36	7.90	0.99	5.23	29.8	30	198.01
	225	6250	521	**408**	322	199	1.39	9.49	1.19	6.27	34.7	27	235.66
	65	2280	253	**200**	160	101	1.33	3.50	0.44	2.36	16.8	49	96.65
	105	3280	323	**255**	203	128	1.34	5.25	0.67	3.51	22.5	38	140.21
2800	145	4280	409	**323**	257	162	1.34	7.00	0.89	4.67	28.2	33	183.19
	185	5280	474	**374**	297	186	1.35	8.81	1.11	5.83	33.1	30	220.17
	225	6280	571	**448**	354	220	1.38	10.59	1.33	6.99	38.6	27	264.68
	65	2300	271	**214**	171	108	1.33	3.75	0.48	2.51	17.9	49	103.26
	105	3300	341	**270**	215	136	1.33	5.62	0.71	3.75	24.0	38	151.78
3000	145	4300	434	**343**	273	172	1.34	7.49	0.95	4.99	30.1	33	196.14
	185	5300	500	**394**	313	196	1.35	9.42	1.19	6.23	35.3	30	235.66
	225	6300	605	**474**	375	232	1.38	11.31	1.43	7.46	41.3	27	281.81

PRICES AND OUTPUTS – HEIGHT 180–190 MM

with heat outputs depending on length and depth



Model		2019	3019	4019	5018	6018
Order number		**RRN20019...2.XA**	**RRN30019...2.XA**	**RRN40019...2.XA**	**RRN50018...2.XA**	**RRN60018...2.XA**
Height H	[mm]	190	190	190	180	180
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.33	0.50	0.66	0.89	1.08
Exponent n	[ ]	1.2300	1.2700	1.2500	1.2900	1.3100
Standard heat output Φ_L	[watts/el.]	15	20	27	32	39
Price per element	[EUR/el.]	26.68	28.49	32.26	39.94	46.21

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	87	160.08	122	170.94	160	193.56	191	239.64	232	277.26
360	8	116	213.44	162	227.92	214	258.08	254	319.52	310	369.68
450	10	145	266.80	203	284.90	267	322.60	318	399.40	387	462.10
540	12	174	320.16	244	341.88	320	387.12	382	479.28	464	554.52
630	14	203	373.52	284	398.86	374	451.64	445	559.16	542	646.94
720	16	232	426.88	325	455.84	427	516.16	509	639.04	619	739.36
810	18	261	480.24	365	512.82	481	580.68	572	718.92	697	831.78
900	20	290	533.60	406	569.80	534	645.20	636	798.80	774	924.20
990	22	319	586.96	447	626.78	587	709.72	700	878.68	851	1016.62
1080	24	348	640.32	487	683.76	641	774.24	763	958.56	929	1109.04
1170	26	377	693.68	528	740.74	694	838.76	827	1038.44	1006	1201.46
1260	28	406	747.04	568	797.72	748	903.28	890	1118.32	1084	1293.88
1350	30	435	800.40	609	854.70	801	967.80	954	1198.20	1161	1386.30
1440	32	464	853.76	650	911.68	854	1032.32	1018	1278.08	1238	1478.72
1530	34	493	907.12	690	968.66	908	1096.84	1081	1357.96	1316	1571.14
1620	36	522	960.48	731	1025.64	961	1161.36	1145	1437.84	1393	1663.56
1710	38	551	1013.84	771	1082.62	1015	1225.88	1208	1517.72	1471	1755.98
1800	40	580	1067.20	812	1139.60	1068	1290.40	1272	1597.60	1548	1848.40
1890	42	609	1120.56	853	1196.58	1121	1354.92	1336	1677.48	1625	1940.82
1980	44	638	1173.92	893	1253.56	1175	1419.44	1399	1757.36	1703	2033.24
2070	46	667	1227.28	934	1310.54	1228	1483.96	1463	1837.24	1780	2125.66
2160	48	696	1280.64	974	1367.52	1282	1548.48	1526	1917.12	1858	2218.08
2250	50	725	1334.00	1015	1424.50	1335	1613.00	1590	1997.00	1935	2310.50
2340	52	754	1387.36	1056	1481.48	1388	1677.52	1654	2076.88	2012	2402.92
2430	54	783	1440.72	1096	1538.46	1442	1742.04	1717	2156.76	2090	2495.34
2520	56	812	1494.08	1137	1595.44	1495	1806.56	1781	2236.64	2167	2587.76
2610	58	841	1547.44	1177	1652.42	1549	1871.08	1844	2316.52	2245	2680.18
2700	60	870	1600.80	1218	1709.40	1602	1935.60	1908	2396.40	2322	2772.60
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 260 MM

with heat outputs depending on length and depth

Model		2026	3026	4026	5026	6026
Order number		RRN20026...2.XA	RRN30026...2.XA	RRN40026...2.XA	RRN50026...2.XA	RRN60026...2.XA
Height H	[mm]	260	260	260	260	260
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.42	0.63	0.84	1.11	1.34
Exponent n	[ ]	1.2500	1.3100	1.3000	1.3300	1.3600
Standard heat output Φ_L	[watts/el.]	20	28	36	45	53
Price per element	[EUR/el.]	27.44	29.50	32.93	40.11	46.74

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	122	164.64	167	177.00	218	197.58	267	240.66	316	280.44
360	8	162	219.52	222	236.00	290	263.44	356	320.88	422	373.92
450	10	203	274.40	278	295.00	363	329.30	445	401.10	527	467.40
540	12	244	329.28	334	354.00	436	395.16	534	481.32	632	560.88
630	14	284	384.16	389	413.00	508	461.02	623	561.54	738	654.36
720	16	325	439.04	445	472.00	581	526.88	712	641.76	843	747.84
810	18	365	493.92	500	531.00	653	592.74	801	721.98	949	841.32
900	20	406	548.80	556	590.00	726	658.60	890	802.20	1054	934.80
990	22	447	603.68	612	649.00	799	724.46	979	882.42	1159	1028.28
1080	24	487	658.56	667	708.00	871	790.32	1068	962.64	1265	1121.76
1170	26	528	713.44	723	767.00	944	856.18	1157	1042.86	1370	1215.24
1260	28	568	768.32	778	826.00	1016	922.04	1246	1123.08	1476	1308.72
1350	30	609	823.20	834	885.00	1089	987.90	1335	1203.30	1581	1402.20
1440	32	650	878.08	890	944.00	1162	1053.76	1424	1283.52	1686	1495.68
1530	34	690	932.96	945	1003.00	1234	1119.62	1513	1363.74	1792	1589.16
1620	36	731	987.84	1001	1062.00	1307	1185.48	1602	1443.96	1897	1682.64
1710	38	771	1042.72	1056	1121.00	1379	1251.34	1691	1524.18	2003	1776.12
1800	40	812	1097.60	1112	1180.00	1452	1317.20	1780	1604.40	2108	1869.60
1890	42	853	1152.48	1168	1239.00	1525	1383.06	1869	1684.62	2213	1963.08
1980	44	893	1207.36	1223	1298.00	1597	1448.92	1958	1764.84	2319	2056.56
2070	46	934	1262.24	1279	1357.00	1670	1514.78	2047	1845.06	2424	2150.04
2160	48	974	1317.12	1334	1416.00	1742	1580.64	2136	1925.28	2530	2243.52
2250	50	1015	1372.00	1390	1475.00	1815	1646.50	2225	2005.50	2635	2337.00
2340	52	1056	1426.88	1446	1534.00	1888	1712.36	2314	2085.72	2740	2430.48
2430	54	1096	1481.76	1501	1593.00	1960	1778.22	2403	2165.94	2846	2523.96
2520	56	1137	1536.64	1557	1652.00	2033	1844.08	2492	2246.16	2951	2617.44
2610	58	1177	1591.52	1612	1711.00	2105	1909.94	2581	2326.38	3057	2710.92
2700	60	1218	1646.40	1668	1770.00	2178	1975.80	2670	2406.60	3162	2804.40
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
		69 and 89	243.66 €
31, 41, 32, and 42	Valve on side at top	**96 and 98**	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 300 MM

with heat outputs depending on length and depth

Model		2030	3030	4030	5030	6030
Order number		RRN20030...2.XA	RRN30030...2.XA	RRN40030...2.XA	RRN50030...2.XA	RRN60030...2.XA
Height H	[mm]	300	300	300	300	300
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.47	0.70	0.93	1.23	1.49
Exponent n	[ ]	1.2600	1.3300	1.3300	1.3600	1.3900
Standard heat output Φ_L	[watts/el.]	24	33	43	53	62
Price per element	[EUR/el.]	27.92	30.31	33.52	40.05	46.79

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	143	167.52	196	181.86	256	201.12	316	240.30	372	280.74
360	8	191	223.36	262	242.48	342	268.16	422	320.40	496	374.32
450	10	239	279.20	327	303.10	427	335.20	527	400.50	620	467.90
540	12	287	335.04	392	363.72	512	402.24	632	480.60	744	561.48
630	14	335	390.88	458	424.34	598	469.28	738	560.70	868	655.06
720	16	382	446.72	523	484.96	683	536.32	843	640.80	992	748.64
810	18	430	502.56	589	545.58	769	603.36	949	720.90	1116	842.22
900	20	478	558.40	654	606.20	854	670.40	1054	801.00	1240	935.80
990	22	526	614.24	719	666.82	939	737.44	1159	881.10	1364	1029.38
1080	24	574	670.08	785	727.44	1025	804.48	1265	961.20	1488	1122.96
1170	26	621	725.92	850	788.06	1110	871.52	1370	1041.30	1612	1216.54
1260	28	669	781.76	916	848.68	1196	938.56	1476	1121.40	1736	1310.12
1350	30	717	837.60	981	909.30	1281	1005.60	1581	1201.50	1860	1403.70
1440	32	765	893.44	1046	969.92	1366	1072.64	1686	1281.60	1984	1497.28
1530	34	813	949.28	1112	1030.54	1452	1139.68	1792	1361.70	2108	1590.86
1620	36	860	1005.12	1177	1091.16	1537	1206.72	1897	1441.80	2232	1684.44
1710	38	908	1060.96	1243	1151.78	1623	1273.76	2003	1521.90	2356	1778.02
1800	40	956	1116.80	1308	1212.40	1708	1340.80	2108	1602.00	2480	1871.60
1890	42	1004	1172.64	1373	1273.02	1793	1407.84	2213	1682.10	2604	1965.18
1980	44	1052	1228.48	1439	1333.64	1879	1474.88	2319	1762.20	2728	2058.76
2070	46	1099	1284.32	1504	1394.26	1964	1541.92	2424	1842.30	2852	2152.34
2160	48	1147	1340.16	1570	1454.88	2050	1608.96	2530	1922.40	2976	2245.92
2250	50	1195	1396.00	1635	1515.50	2135	1676.00	2635	2002.50	3100	2339.50
2340	52	1243	1451.84	1700	1576.12	2220	1743.04	2740	2082.60	3224	2433.08
2430	54	1291	1507.68	1766	1636.74	2306	1810.08	2846	2162.70	3348	2526.66
2520	56	1338	1563.52	1831	1697.36	2391	1877.12	2951	2242.80	3472	2620.24
2610	58	1386	1619.36	1897	1757.98	2477	1944.16	3057	2322.90	3596	2713.82
2700	60	1434	1675.20	1962	1818.60	2562	2011.20	3162	2403.00	3720	2807.40
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 350 MM

with heat outputs depending on length and depth

Model		2035	3035	4035	5035	6035
Order number		RRN20035...2.XA	RRN30035...2.XA	RRN40035...2.XA	RRN50035...2.XA	RRN60035...2.XA
Height H	[mm]	350	350	350	350	350
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.53	0.79	1.06	1.38	1.67
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	28	38	49	61	72
Price per element	[EUR/el.]	28.45	31.19	34.69	40.86	48.10

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	166	170.70	228	187.14	296	208.14	366	245.16	429	288.60
360	8	222	227.60	304	249.52	395	277.52	488	326.88	572	384.80
450	10	277	284.50	380	311.90	494	346.90	610	408.60	715	481.00
540	12	332	341.40	456	374.28	593	416.28	732	490.32	858	577.20
630	14	388	398.30	532	436.66	692	485.66	854	572.04	1001	673.40
720	16	443	455.20	608	499.04	790	555.04	976	653.76	1144	769.60
810	18	499	512.10	684	561.42	889	624.42	1098	735.48	1287	865.80
900	20	554	569.00	760	623.80	988	693.80	1220	817.20	1430	962.00
990	22	609	625.90	836	686.18	1087	763.18	1342	898.92	1573	1058.20
1080	24	665	682.80	912	748.56	1186	832.56	1464	980.64	1716	1154.40
1170	26	720	739.70	988	810.94	1284	901.94	1586	1062.36	1859	1250.60
1260	28	776	796.60	1064	873.32	1383	971.32	1708	1144.08	2002	1346.80
1350	30	831	853.50	1140	935.70	1482	1040.70	1830	1225.80	2145	1443.00
1440	32	886	910.40	1216	998.08	1581	1110.08	1952	1307.52	2288	1539.20
1530	34	942	967.30	1292	1060.46	1680	1179.46	2074	1389.24	2431	1635.40
1620	36	997	1024.20	1368	1122.84	1778	1248.84	2196	1470.96	2574	1731.60
1710	38	1053	1081.10	1444	1185.22	1877	1318.22	2318	1552.68	2717	1827.80
1800	40	1108	1138.00	1520	1247.60	1976	1387.60	2440	1634.40	2860	1924.00
1890	42	1163	1194.90	1596	1309.98	2075	1456.98	2562	1716.12	3003	2020.20
1980	44	1219	1251.80	1672	1372.36	2174	1526.36	2684	1797.84	3146	2116.40
2070	46	1274	1308.70	1748	1434.74	2272	1595.74	2806	1879.56	3289	2212.60
2160	48	1330	1365.60	1824	1497.12	2371	1665.12	2928	1961.28	3432	2308.80
2250	50	1385	1422.50	1900	1559.50	2470	1734.50	3050	2043.00	3575	2405.00
2340	52	1440	1479.40	1976	1621.88	2569	1803.88	3172	2124.72	3718	2501.20
2430	54	1496	1536.30	2052	1684.26	2668	1873.26	3294	2206.44	3861	2597.40
2520	56	1551	1593.20	2128	1746.64	2766	1942.64	3416	2288.16	4004	2693.60
2610	58	1607	1650.10	2204	1809.02	2865	2012.02	3538	2369.88	4147	2789.80
2700	60	1662	1707.00	2280	1871.40	2964	2081.40	3660	2451.60	4290	2886.00
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
		69 and 89	243.66 €
31, 41, 32, and 42	Valve on side at top	**96 and 98**	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 400 MM

with heat outputs depending on length and depth

Model		2040	3040	4040	5040	6040
Order number		RRN20040...2.XA	RRN30040...2.XA	RRN40040...2.XA	RRN50040...2.XA	RRN60040...2.XA
Height H	[mm]	400	400	400	400	400
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.59	0.88	1.18	1.53	1.85
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	31	43	56	69	81
Price per element	[EUR/el.]	28.71	32.26	35.37	42.13	49.58

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	188	172.26	259	193.56	335	212.22	414	252.78	485	297.48
360	8	251	229.68	345	258.08	447	282.96	552	337.04	646	396.64
450	10	314	287.10	431	322.60	559	353.70	690	421.30	808	495.80
540	12	377	344.52	517	387.12	671	424.44	828	505.56	970	594.96
630	14	440	401.94	603	451.64	783	495.18	966	589.82	1131	694.12
720	16	502	459.36	690	516.16	894	565.92	1104	674.08	1293	793.28
810	18	565	516.78	776	580.68	1006	636.66	1242	758.34	1454	892.44
900	20	628	574.20	862	645.20	1118	707.40	1380	842.60	1616	991.60
990	22	691	631.62	948	709.72	1230	778.14	1518	926.86	1778	1090.76
1080	24	754	689.04	1034	774.24	1342	848.88	1656	1011.12	1939	1189.92
1170	26	816	746.46	1121	838.76	1453	919.62	1794	1095.38	2101	1289.08
1260	28	879	803.88	1207	903.28	1565	990.36	1932	1179.64	2262	1388.24
1350	30	942	861.30	1293	967.80	1677	1061.10	2070	1263.90	2424	1487.40
1440	32	1005	918.72	1379	1032.32	1789	1131.84	2208	1348.16	2586	1586.56
1530	34	1068	976.14	1465	1096.84	1901	1202.58	2346	1432.42	2747	1685.72
1620	36	1130	1033.56	1552	1161.36	2012	1273.32	2484	1516.68	2909	1784.88
1710	38	1193	1090.98	1638	1225.88	2124	1344.06	2622	1600.94	3070	1884.04
1800	40	1256	1148.40	1724	1290.40	2236	1414.80	2760	1685.20	3232	1983.20
1890	42	1319	1205.82	1810	1354.92	2348	1485.54	2898	1769.46	3394	2082.36
1980	44	1382	1263.24	1896	1419.44	2460	1556.28	3036	1853.72	3555	2181.52
2070	46	1444	1320.66	1983	1483.96	2571	1627.02	3174	1937.98	3717	2280.68
2160	48	1507	1378.08	2069	1548.48	2683	1697.76	3312	2022.24	3878	2379.84
2250	50	1570	1435.50	2155	1613.00	2795	1768.50	3450	2106.50	4040	2479.00
2340	52	1633	1492.92	2241	1677.52	2907	1839.24	3588	2190.76	4202	2578.16
2430	54	1696	1550.34	2327	1742.04	3019	1909.98	3726	2275.02	4363	2677.32
2520	56	1758	1607.76	2414	1806.56	3130	1980.72	3864	2359.28	4525	2776.48
2610	58	1821	1665.18	2500	1871.08	3242	2051.46	4002	2443.54	4686	2875.64
2700	60	1884	1722.60	2586	1935.60	3354	2122.20	4140	2527.80	4848	2974.80
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 450 MM

with heat outputs depending on length and depth

Model		2045	3045	4045	5045	6045
Order number		RRN20045...2.XA	RRN30045...2.XA	RRN40045...2.XA	RRN50045...2.XA	RRN60045...2.XA
Height H	[mm]	450	450	450	450	450
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.65	0.97	1.30	1.68	2.03
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	35	48	62	77	90
Price per element	[EUR/el.]	29.47	33.05	36.85	44.03	51.43

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	210	176.82	289	198.30	374	221.10	461	264.18	540	308.58
360	8	280	235.76	386	264.40	498	294.80	615	352.24	720	411.44
450	10	350	294.70	482	330.50	623	368.50	769	440.30	900	514.30
540	12	420	353.64	578	396.60	748	442.20	923	528.36	1080	617.16
630	14	490	412.58	675	462.70	872	515.90	1077	616.42	1260	720.02
720	16	560	471.52	771	528.80	997	589.60	1230	704.48	1440	822.88
810	18	630	530.46	868	594.90	1121	663.30	1384	792.54	1620	925.74
900	20	700	589.40	964	661.00	1246	737.00	1538	880.60	1800	1028.60
990	22	770	648.34	1060	727.10	1371	810.70	1692	968.66	1980	1131.46
1080	24	840	707.28	1157	793.20	1495	884.40	1846	1056.72	2160	1234.32
1170	26	910	766.22	1253	859.30	1620	958.10	1999	1144.78	2340	1337.18
1260	28	980	825.16	1350	925.40	1744	1031.80	2153	1232.84	2520	1440.04
1350	30	1050	884.10	1446	991.50	1869	1105.50	2307	1320.90	2700	1542.90
1440	32	1120	943.04	1542	1057.60	1994	1179.20	2461	1408.96	2880	1645.76
1530	34	1190	1001.98	1639	1123.70	2118	1252.90	2615	1497.02	3060	1748.62
1620	36	1260	1060.92	1735	1189.80	2243	1326.60	2768	1585.08	3240	1851.48
1710	38	1330	1119.86	1832	1255.90	2367	1400.30	2922	1673.14	3420	1954.34
1800	40	1400	1178.80	1928	1322.00	2492	1474.00	3076	1761.20	3600	2057.20
1890	42	1470	1237.74	2024	1388.10	2617	1547.70	3230	1849.26	3780	2160.06
1980	44	1540	1296.68	2121	1454.20	2741	1621.40	3384	1937.32	3960	2262.92
2070	46	1610	1355.62	2217	1520.30	2866	1695.10	3537	2025.38	4140	2365.78
2160	48	1680	1414.56	2314	1586.40	2990	1768.80	3691	2113.44	4320	2468.64
2250	50	1750	1473.50	2410	1652.50	3115	1842.50	3845	2201.50	4500	2571.50
2340	52	1820	1532.44	2506	1718.60	3240	1916.20	3999	2289.56	4680	2674.36
2430	54	1890	1591.38	2603	1784.70	3364	1989.90	4153	2377.62	4860	2777.22
2520	56	1960	1650.32	2699	1850.80	3489	2063.60	4306	2465.68	5040	2880.08
2610	58	2030	1709.26	2796	1916.90	3613	2137.30	4460	2553.74	5220	2982.94
2700	60	2100	1768.20	2892	1983.00	3738	2211.00	4614	2641.80	5400	3085.80
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
		69 and 89	243.66 €
31, 41, 32, and 42	Valve on side at top	**96 and 98**	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 500 MM

with heat outputs depending on length and depth

Model		2050	3050	4050	5050	6050
Order number		RRN20050...2.XA	RRN30050...2.XA	RRN40050...2.XA	RRN50050...2.XA	RRN60050...2.XA
Height H	[mm]	500	500	500	500	500
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.71	1.06	1.42	1.83	2.21
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	39	53	69	85	99
Price per element	[EUR/el.]	30.27	34.07	37.95	44.87	52.79

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	232	181.62	319	204.42	412	227.70	509	269.22	595	316.74
360	8	309	242.16	426	272.56	549	303.60	678	358.96	793	422.32
450	10	386	302.70	532	340.70	686	379.50	848	448.70	991	527.90
540	12	463	363.24	638	408.84	823	455.40	1018	538.44	1189	633.48
630	14	540	423.78	745	476.98	960	531.30	1187	628.18	1387	739.06
720	16	618	484.32	851	545.12	1098	607.20	1357	717.92	1586	844.64
810	18	695	544.86	958	613.26	1235	683.10	1526	807.66	1784	950.22
900	20	772	605.40	1064	681.40	1372	759.00	1696	897.40	1982	1055.80
990	22	849	665.94	1170	749.54	1509	834.90	1866	987.14	2180	1161.38
1080	24	926	726.48	1277	817.68	1646	910.80	2035	1076.88	2378	1266.96
1170	26	1004	787.02	1383	885.82	1784	986.70	2205	1166.62	2577	1372.54
1260	28	1081	847.56	1490	953.96	1921	1062.60	2374	1256.36	2775	1478.12
1350	30	1158	908.10	1596	1022.10	2058	1138.50	2544	1346.10	2973	1583.70
1440	32	1235	968.64	1702	1090.24	2195	1214.40	2714	1435.84	3171	1689.28
1530	34	1312	1029.18	1809	1158.38	2332	1290.30	2883	1525.58	3369	1794.86
1620	36	1390	1089.72	1915	1226.52	2470	1366.20	3053	1615.32	3568	1900.44
1710	38	1467	1150.26	2022	1294.66	2607	1442.10	3222	1705.06	3766	2006.02
1800	40	1544	1210.80	2128	1362.80	2744	1518.00	3392	1794.80	3964	2111.60
1890	42	1621	1271.34	2234	1430.94	2881	1593.90	3562	1884.54	4162	2217.18
1980	44	1698	1331.88	2341	1499.08	3018	1669.80	3731	1974.28	4360	2322.76
2070	46	1776	1392.42	2447	1567.22	3156	1745.70	3901	2064.02	4559	2428.34
2160	48	1853	1452.96	2554	1635.36	3293	1821.60	4070	2153.76	4757	2533.92
2250	50	1930	1513.50	2660	1703.50	3430	1897.50	4240	2243.50	4955	2639.50
2340	52	2007	1574.04	2766	1771.64	3567	1973.40	4410	2333.24	5153	2745.08
2430	54	2084	1634.58	2873	1839.78	3704	2049.30	4579	2422.98	5351	2850.66
2520	56	2162	1695.12	2979	1907.92	3842	2125.20	4749	2512.72	5550	2956.24
2610	58	2239	1755.66	3086	1976.06	3979	2201.10	4918	2602.46	5748	3061.82
2700	60	2316	1816.20	3192	2044.20	4116	2277.00	5088	2692.20	5946	3167.40
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 550 MM

with heat outputs depending on length and depth

Model		2055	3055	4055	5055	6055
Order number		RRN20055...2.XA	RRN30055...2.XA	RRN40055...2.XA	RRN50055...2.XA	RRN60055...2.XA
Height H	[mm]	550	550	550	550	550
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.77	1.16	1.54	1.99	2.40
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	42	58	75	93	108
Price per element	[EUR/el.]	30.77	35.06	39.58	46.50	55.27

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	253	184.62	350	210.36	449	237.48	555	279.00	648	331.62
360	8	338	246.16	466	280.48	599	316.64	740	372.00	864	442.16
450	10	422	307.70	583	350.60	749	395.80	925	465.00	1080	552.70
540	12	506	369.24	700	420.72	899	474.96	1110	558.00	1296	663.24
630	14	591	430.78	816	490.84	1049	554.12	1295	651.00	1512	773.78
720	16	675	492.32	933	560.96	1198	633.28	1480	744.00	1728	884.32
810	18	760	553.86	1049	631.08	1348	712.44	1665	837.00	1944	994.86
900	20	844	615.40	1166	701.20	1498	791.60	1850	930.00	2160	1105.40
990	22	928	676.94	1283	771.32	1648	870.76	2035	1023.00	2376	1215.94
1080	24	1013	738.48	1399	841.44	1798	949.92	2220	1116.00	2592	1326.48
1170	26	1097	800.02	1516	911.56	1947	1029.08	2405	1209.00	2808	1437.02
1260	28	1182	861.56	1632	981.68	2097	1108.24	2590	1302.00	3024	1547.56
1350	30	1266	923.10	1749	1051.80	2247	1187.40	2775	1395.00	3240	1658.10
1440	32	1350	984.64	1866	1121.92	2397	1266.56	2960	1488.00	3456	1768.64
1530	34	1435	1046.18	1982	1192.04	2547	1345.72	3145	1581.00	3672	1879.18
1620	36	1519	1107.72	2099	1262.16	2696	1424.88	3330	1674.00	3888	1989.72
1710	38	1604	1169.26	2215	1332.28	2846	1504.04	3515	1767.00	4104	2100.26
1800	40	1688	1230.80	2332	1402.40	2996	1583.20	3700	1860.00	4320	2210.80
1890	42	1772	1292.34	2449	1472.52	3146	1662.36	3885	1953.00	4536	2321.34
1980	44	1857	1353.88	2565	1542.64	3296	1741.52	4070	2046.00	4752	2431.88
2070	46	1941	1415.42	2682	1612.76	3445	1820.68	4255	2139.00	4968	2542.42
2160	48	2026	1476.96	2798	1682.88	3595	1899.84	4440	2232.00	5184	2652.96
2250	50	2110	1538.50	2915	1753.00	3745	1979.00	4625	2325.00	5400	2763.50
2340	52	2194	1600.04	3032	1823.12	3895	2058.16	4810	2418.00	5616	2874.04
2430	54	2279	1661.58	3148	1893.24	4045	2137.32	4995	2511.00	5832	2984.58
2520	56	2363	1723.12	3265	1963.36	4194	2216.48	5180	2604.00	6048	3095.12
2610	58	2448	1784.66	3381	2033.48	4344	2295.64	5365	2697.00	6264 ⋈	3205.66
2700	60	2532	1846.20	3498	2103.60	4494	2374.80	5550	2790.00	6480 ⋈	3316.20
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

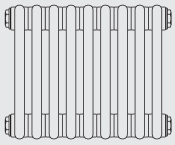
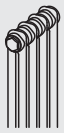
Connection surcharge (per radiator) **with built-in valve**

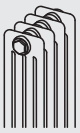
Connection system		Connection arrangement	Surcharge
		69 and 89	243.66 €
31, 41, 32, and 42	Valve on side at top	**96 and 98**	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

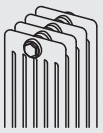
The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 600 MM

with heat outputs depending on length and depth





Model		2060	3060	4060	5060	6060
Order number		**RRN20060...2.XA**	**RRN30060...2.XA**	**RRN40060...2.XA**	**RRN50060...2.XA**	**RRN60060...2.XA**
Height H	[mm]	600	600	600	600	600
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.83	1.25	1.66	2.14	2.58
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	46	63	81	100	117
Price per element	[EUR/el.]	31.68	36.17	40.95	48.60	57.31

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	275	190.08	379	217.02	487	245.70	600	291.60	702	343.86
360	8	366	253.44	506	289.36	649	327.60	800	388.80	936	458.48
450	10	458	316.80	632	361.70	811	409.50	1000	486.00	1170	573.10
540	12	550	380.16	758	434.04	973	491.40	1200	583.20	1404	687.72
630	14	641	443.52	885	506.38	1135	573.30	1400	680.40	1638	802.34
720	16	733	506.88	1011	578.72	1298	655.20	1600	777.60	1872	916.96
810	18	824	570.24	1138	651.06	1460	737.10	1800	874.80	2106	1031.58
900	20	916	633.60	1264	723.40	1622	819.00	2000	972.00	2340	1146.20
990	22	1008	696.96	1390	795.74	1784	900.90	2200	1069.20	2574	1260.82
1080	24	1099	760.32	1517	868.08	1946	982.80	2400	1166.40	2808	1375.44
1170	26	1191	823.68	1643	940.42	2109	1064.70	2600	1263.60	3042	1490.06
1260	28	1282	887.04	1770	1012.76	2271	1146.60	2800	1360.80	3276	1604.68
1350	30	1374	950.40	1896	1085.10	2433	1228.50	3000	1458.00	3510	1719.30
1440	32	1466	1013.76	2022	1157.44	2595	1310.40	3200	1555.20	3744	1833.92
1530	34	1557	1077.12	2149	1229.78	2757	1392.30	3400	1652.40	3978	1948.54
1620	36	1649	1140.48	2275	1302.12	2920	1474.20	3600	1749.60	4212	2063.16
1710	38	1740	1203.84	2402	1374.46	3082	1556.10	3800	1846.80	4446	2177.78
1800	40	1832	1267.20	2528	1446.80	3244	1638.00	4000	1944.00	4680	2292.40
1890	42	1924	1330.56	2654	1519.14	3406	1719.90	4200	2041.20	4914	2407.02
1980	44	2015	1393.92	2781	1591.48	3568	1801.80	4400	2138.40	5148	2521.64
2070	46	2107	1457.28	2907	1663.82	3731	1883.70	4600	2235.60	5382	2636.26
2160	48	2198	1520.64	3034	1736.16	3893	1965.60	4800	2332.80	5616	2750.88
2250	50	2290	1584.00	3160	1808.50	4055	2047.50	5000	2430.00	5850	2865.50
2340	52	2382	1647.36	3286	1880.84	4217	2129.40	5200	2527.20	6084	2980.12
2430	54	2473	1710.72	3413	1953.18	4379	2211.30	5400	2624.40	6318 ⋈	3094.74
2520	56	2565	1774.08	3539	2025.52	4542	2293.20	5600	2721.60	6552 ⋈	3209.36
2610	58	2656	1837.44	3666	2097.86	4704	2375.10	5800	2818.80	6786 ⋈	3323.98
2700	60	2748	1900.80	3792	2170.20	4866	2457.00	6000	2916.00	7020 ⋈	3438.60
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 750 MM

with heat outputs depending on length and depth

Model		2075	3075	4075	5075	6075
Order number		RRN20075...2.XA	RRN30075...2.XA	RRN40075...2.XA	RRN50075...2.XA	RRN60075...2.XA
Height H	[mm]	750	750	750	750	750
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.02	1.52	2.03	2.59	3.12
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4000
Standard heat output Φ_L	[watts/el.]	57	78	100	123	143
Price per element	[EUR/el.]	32.99	38.80	46.50	55.94	65.31

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	339	197.94	467	232.80	597	279.00	738	335.64	858	391.86
360	8	452	263.92	623	310.40	796	372.00	984	447.52	1144	522.48
450	10	565	329.90	779	388.00	995	465.00	1230	559.40	1430	653.10
540	12	678	395.88	935	465.60	1194	558.00	1476	671.28	1716	783.72
630	14	791	461.86	1091	543.20	1393	651.00	1722	783.16	2002	914.34
720	16	904	527.84	1246	620.80	1592	744.00	1968	895.04	2288	1044.96
810	18	1017	593.82	1402	698.40	1791	837.00	2214	1006.92	2574	1175.58
900	20	1130	659.80	1558	776.00	1990	930.00	2460	1118.80	2860	1306.20
990	22	1243	725.78	1714	853.60	2189	1023.00	2706	1230.68	3146	1436.82
1080	24	1356	791.76	1870	931.20	2388	1116.00	2952	1342.56	3432	1567.44
1170	26	1469	857.74	2025	1008.80	2587	1209.00	3198	1454.44	3718	1698.06
1260	28	1582	923.72	2181	1086.40	2786	1302.00	3444	1566.32	4004	1828.68
1350	30	1695	989.70	2337	1164.00	2985	1395.00	3690	1678.20	4290	1959.30
1440	32	1808	1055.68	2493	1241.60	3184	1488.00	3936	1790.08	4576	2089.92
1530	34	1921	1121.66	2649	1319.20	3383	1581.00	4182	1901.96	4862	2220.54
1620	36	2034	1187.64	2804	1396.80	3582	1674.00	4428	2013.84	5148	2351.16
1710	38	2147	1253.62	2960	1474.40	3781	1767.00	4674	2125.72	5434	2481.78
1800	40	2260	1319.60	3116	1552.00	3980	1860.00	4920	2237.60	5720	2612.40
1890	42	2373	1385.58	3272	1629.60	4179	1953.00	5166	2349.48	6006	2743.02
1980	44	2486	1451.56	3428	1707.20	4378	2046.00	5412	2461.36	6292 ⋈	2873.64
2070	46	2599	1517.54	3583	1784.80	4577	2139.00	5658	2573.24	6578 ⋈	3004.26
2160	48	2712	1583.52	3739	1862.40	4776	2232.00	5904	2685.12	6864 ⋈	3134.88
2250	50	2825	1649.50	3895	1940.00	4975	2325.00	6150	2797.00	7150 ⋈	3265.50
2340	52	2938	1715.48	4051	2017.60	5174	2418.00	6396 ⋈	2908.88	7436 ⋈	3396.12
2430	54	3051	1781.46	4207	2095.20	5373	2511.00	6642 ⋈	3020.76	7722 ⋈	3526.74
2520	56	3164	1847.44	4362	2172.80	5572	2604.00	6888 ⋈	3132.64	8008 ⋈	3657.36
2610	58	3277	1913.42	4518	2250.40	5771	2697.00	7134 ⋈	3244.52	8294 ⋈	3787.98
2700	60	3390	1979.40	4674	2328.00	5970	2790.00	7380 ⋈	3356.40	8580 ⋈	3918.60
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
31, 41, 32, and 42	Valve on side at top	69 and 89	243.66 €
		96 and 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 900 MM

with heat outputs depending on length and depth

Model		2090	3090	4090	5090	6090
Order number		RRN20090...2.XA	RRN30090...2.XA	RRN40090...2.XA	RRN50090...2.XA	RRN60090...2.XA
Height H	[mm]	900	900	900	900	900
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.20	1.79	2.39	3.05	3.67
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4000
Standard heat output Φ_L	[watts/el.]	67	92	117	144	168
Price per element	[EUR/el.]	35.15	41.77	53.62	63.46	73.46

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	402	210.90	554	250.62	702	321.72	864	380.76	1008	440.76
360	8	536	281.20	738	334.16	936	428.96	1152	507.68	1344	587.68
450	10	670	351.50	923	417.70	1170	536.20	1440	634.60	1680	734.60
540	12	804	421.80	1108	501.24	1404	643.44	1728	761.52	2016	881.52
630	14	938	492.10	1292	584.78	1638	750.68	2016	888.44	2352	1028.44
720	16	1072	562.40	1477	668.32	1872	857.92	2304	1015.36	2688	1175.36
810	18	1206	632.70	1661	751.86	2106	965.16	2592	1142.28	3024	1322.28
900	20	1340	703.00	1846	835.40	2340	1072.40	2880	1269.20	3360	1469.20
990	22	1474	773.30	2031	918.94	2574	1179.64	3168	1396.12	3696	1616.12
1080	24	1608	843.60	2215	1002.48	2808	1286.88	3456	1523.04	4032	1763.04
1170	26	1742	913.90	2400	1086.02	3042	1394.12	3744	1649.96	4368	1909.96
1260	28	1876	984.20	2584	1169.56	3276	1501.36	4032	1776.88	4704	2056.88
1350	30	2010	1054.50	2769	1253.10	3510	1608.60	4320	1903.80	5040	2203.80
1440	32	2144	1124.80	2954	1336.64	3744	1715.84	4608	2030.72	5376	2350.72
1530	34	2278	1195.10	3138	1420.18	3978	1823.08	4896	2157.64	5712	2497.64
1620	36	2412	1265.40	3323	1503.72	4212	1930.32	5184	2284.56	6048	2644.56
1710	38	2546	1335.70	3507	1587.26	4446	2037.56	5472	2411.48	6384 ⋈	2791.48
1800	40	2680	1406.00	3692	1670.80	4680	2144.80	5760	2538.40	6720 ⋈	2938.40
1890	42	2814	1476.30	3877	1754.34	4914	2252.04	6048	2665.32	7056 ⋈	3085.32
1980	44	2948	1546.60	4061	1837.88	5148	2359.28	6336 ⋈	2792.24	7392 ⋈	3232.24
2070	46	3082	1616.90	4246	1921.42	5382	2466.52	6624 ⋈	2919.16	7728 ⋈	3379.16
2160	48	3216	1687.20	4430	2004.96	5616	2573.76	6912 ⋈	3046.08	8064 ⋈	3526.08
2250	50	3350	1757.50	4615	2088.50	5850	2681.00	7200 ⋈	3173.00	8400 ⋈	3673.00
2340	52	3484	1827.80	4800	2172.04	6084	2788.24	7488 ⋈	3299.92	8736 ⋈	3819.92
2430	54	3618	1898.10	4984	2255.58	6318 ⋈	2895.48	7776 ⋈	3426.84	9072 ⋈	3966.84
2520	56	3752	1968.40	5169	2339.12	6552 ⋈	3002.72	8064 ⋈	3553.76	9408 ⋈	4113.76
2610	58	3886	2038.70	5353	2422.66	6786 ⋈	3109.96	8352 ⋈	3680.68	9744 ⋈	4260.68
2700	60	4020	2109.00	5538	2506.20	7020 ⋈	3217.20	8640 ⋈	3807.60	10080 ⋈	4407.60
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 1000 MM

with heat outputs depending on length and depth

Model		2100	3100	4100	5100	6100
Order number		RRN20100...2.XA	RRN30100...2.XA	RRN40100...2.XA	RRN50100...2.XA	RRN60100...2.XA
Height H	[mm]	1000	1000	1000	1000	1000
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.32	1.98	2.63	3.35	4.03
Exponent n	[ ]	1.3200	1.3600	1.3500	1.3800	1.4000
Standard heat output Φ_L	[watts/el.]	74	102	129	158	185
Price per element	[EUR/el.]	36.76	43.80	57.93	67.65	79.20

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	444	220.56	612	262.80	774	347.58	948	405.90	1110	475.20
360	8	592	294.08	816	350.40	1032	463.44	1264	541.20	1480	633.60
450	10	740	367.60	1020	438.00	1290	579.30	1580	676.50	1850	792.00
540	12	888	441.12	1224	525.60	1548	695.16	1896	811.80	2220	950.40
630	14	1036	514.64	1428	613.20	1806	811.02	2212	947.10	2590	1108.80
720	16	1184	588.16	1632	700.80	2064	926.88	2528	1082.40	2960	1267.20
810	18	1332	661.68	1836	788.40	2322	1042.74	2844	1217.70	3330	1425.60
900	20	1480	735.20	2040	876.00	2580	1158.60	3160	1353.00	3700	1584.00
990	22	1628	808.72	2244	963.60	2838	1274.46	3476	1488.30	4070	1742.40
1080	24	1776	882.24	2448	1051.20	3096	1390.32	3792	1623.60	4440	1900.80
1170	26	1924	955.76	2652	1138.80	3354	1506.18	4108	1758.90	4810	2059.20
1260	28	2072	1029.28	2856	1226.40	3612	1622.04	4424	1894.20	5180	2217.60
1350	30	2220	1102.80	3060	1314.00	3870	1737.90	4740	2029.50	5550	2376.00
1440	32	2368	1176.32	3264	1401.60	4128	1853.76	5056	2164.80	5920	2534.40
1530	34	2516	1249.84	3468	1489.20	4386	1969.62	5372	2300.10	6290 ⋈	2692.80
1620	36	2664	1323.36	3672	1576.80	4644	2085.48	5688	2435.40	6660 ⋈	2851.20
1710	38	2812	1396.88	3876	1664.40	4902	2201.34	6004	2570.70	7030 ⋈	3009.60
1800	40	2960	1470.40	4080	1752.00	5160	2317.20	6320 ⋈	2706.00	7400 ⋈	3168.00
1890	42	3108	1543.92	4284	1839.60	5418	2433.06	6636 ⋈	2841.30	7770 ⋈	3326.40
1980	44	3256	1617.44	4488	1927.20	5676	2548.92	6952 ⋈	2976.60	8140 ⋈	3484.80
2070	46	3404	1690.96	4692	2014.80	5934	2664.78	7268 ⋈	3111.90	8510 ⋈	3643.20
2160	48	3552	1764.48	4896	2102.40	6192 ⋈	2780.64	7584 ⋈	3247.20	8880 ⋈	3801.60
2250	50	3700	1838.00	5100	2190.00	6450 ⋈	2896.50	7900 ⋈	3382.50	9250 ⋈	3960.00
2340	52	3848	1911.52	5304	2277.60	6708 ⋈	3012.36	8216 ⋈	3517.80	9620 ⋈	4118.40
2430	54	3996	1985.04	5508	2365.20	6966 ⋈	3128.22	8532 ⋈	3653.10	9990 ⋈	4276.80
2520	56	4144	2058.56	5712	2452.80	7224 ⋈	3244.08	8848 ⋈	3788.40	10360 ⋈	4435.20
2610	58	4292	2132.08	5916	2540.40	7482 ⋈	3359.94	9164 ⋈	3923.70	10730 ⋈	4593.60
2700	60	4440	2205.60	6120	2628.00	7740 ⋈	3475.80	9480 ⋈	4059.00	11100 ⋈	4752.00
Maximum number of elements per block		66		66		66		66		58	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
31, 41, 32, and 42	Valve on side at top	69 and 89	243.66 €
		96 and 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 1100 MM

with heat outputs depending on length and depth

Model		2110	3110	4110	5110	6110
Order number		RRN20110...2.XA	RRN30110...2.XA	RRN40110...2.XA	RRN50110...2.XA	RRN60110...2.XA
Height H	[mm]	1100	1100	1100	1100	1100
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.44	2.16	2.88	3.65	4.40
Exponent n	[ ]	1.3200	1.3500	1.3500	1.3800	1.4000
Standard heat output Φ_L	[watts/el.]	81	111	141	172	201
Price per element	[EUR/el.]	38.20	49.16	64.02	78.49	93.39

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	486	229.20	666	294.96	846	384.12	1032	470.94	1206	560.34
360	8	648	305.60	888	393.28	1128	512.16	1376	627.92	1608	747.12
450	10	810	382.00	1110	491.60	1410	640.20	1720	784.90	2010	933.90
540	12	972	458.40	1332	589.92	1692	768.24	2064	941.88	2412	1120.68
630	14	1134	534.80	1554	688.24	1974	896.28	2408	1098.86	2814	1307.46
720	16	1296	611.20	1776	786.56	2256	1024.32	2752	1255.84	3216	1494.24
810	18	1458	687.60	1998	884.88	2538	1152.36	3096	1412.82	3618	1681.02
900	20	1620	764.00	2220	983.20	2820	1280.40	3440	1569.80	4020	1867.80
990	22	1782	840.40	2442	1081.52	3102	1408.44	3784	1726.78	4422	2054.58
1080	24	1944	916.80	2664	1179.84	3384	1536.48	4128	1883.76	4824	2241.36
1170	26	2106	993.20	2886	1278.16	3666	1664.52	4472	2040.74	5226	2428.14
1260	28	2268	1069.60	3108	1376.48	3948	1792.56	4816	2197.72	5628	2614.92
1350	30	2430	1146.00	3330	1474.80	4230	1920.60	5160	2354.70	6030	2801.70
1440	32	2592	1222.40	3552	1573.12	4512	2048.64	5504	2511.68	6432 ⋈	2988.48
1530	34	2754	1298.80	3774	1671.44	4794	2176.68	5848	2668.66	6834 ⋈	3175.26
1620	36	2916	1375.20	3996	1769.76	5076	2304.72	6192	2825.64	7236 ⋈	3362.04
1710	38	3078	1451.60	4218	1868.08	5358	2432.76	6536 ⋈	2982.62	7638 ⋈	3548.82
1800	40	3240	1528.00	4440	1966.40	5640	2560.80	6880 ⋈	3139.60	8040 ⋈	3735.60
1890	42	3402	1604.40	4662	2064.72	5922	2688.84	7224 ⋈	3296.58	8442 ⋈	3922.38
1980	44	3564	1680.80	4884	2163.04	6204 ⋈	2816.88	7568 ⋈	3453.56	8844 ⋈	4109.16
2070	46	3726	1757.20	5106	2261.36	6486 ⋈	2944.92				
2160	48	3888	1833.60	5328	2359.68	6768 ⋈	3072.96				
2250	50	4050	1910.00	5550	2458.00	7050 ⋈	3201.00				
2340	52	4212	1986.40	5772	2556.32	7332 ⋈	3329.04				
2430	54	4374	2062.80	5994	2654.64	7614 ⋈	3457.08				
2520	56	4536	2139.20	6216 ⋈	2752.96	7896 ⋈	3585.12				
2610	58	4698	2215.60	6438 ⋈	2851.28	8178 ⋈	3713.16				
2700	60	4860	2292.00	6660 ⋈	2949.60	8460 ⋈	3841.20				
Maximum number of elements per block		66		66		66		44		44	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 1200 MM

with heat outputs depending on length and depth

Model		2120	3120	4120	5120	6120
Order number		RRN20120...2.XA	RRN30120...2.XA	RRN40120...2.XA	RRN50120...2.XA	RRN60120...2.XA
Height H	[mm]	1200	1200	1200	1200	1200
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.56	2.34	3.12	3.96	4.76
Exponent n	[ ]	1.3200	1.3500	1.3500	1.3800	1.4000
Standard heat output Φ_L	[watts/el.]	88	120	152	186	217
Price per element	[EUR/el.]	40.78	57.48	72.32	90.83	105.81

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	528	244.68	720	344.88	912	433.92	1116	544.98	1302	634.86
360	8	704	326.24	960	459.84	1216	578.56	1488	726.64	1736	846.48
450	10	880	407.80	1200	574.80	1520	723.20	1860	908.30	2170	1058.10
540	12	1056	489.36	1440	689.76	1824	867.84	2232	1089.96	2604	1269.72
630	14	1232	570.92	1680	804.72	2128	1012.48	2604	1271.62	3038	1481.34
720	16	1408	652.48	1920	919.68	2432	1157.12	2976	1453.28	3472	1692.96
810	18	1584	734.04	2160	1034.64	2736	1301.76	3348	1634.94	3906	1904.58
900	20	1760	815.60	2400	1149.60	3040	1446.40	3720	1816.60	4340	2116.20
990	22	1936	897.16	2640	1264.56	3344	1591.04	4092	1998.26	4774	2327.82
1080	24	2112	978.72	2880	1379.52	3648	1735.68	4464	2179.92	5208	2539.44
1170	26	2288	1060.28	3120	1494.48	3952	1880.32	4836	2361.58	5642	2751.06
1260	28	2464	1141.84	3360	1609.44	4256	2024.96	5208	2543.24	6076	2962.68
1350	30	2640	1223.40	3600	1724.40	4560	2169.60	5580	2724.90	6510 ⋈	3174.30
1440	32	2816	1304.96	3840	1839.36	4864	2314.24	5952	2906.56	6944 ⋈	3385.92
1530	34	2992	1386.52	4080	1954.32	5168	2458.88	6324 ⋈	3088.22	7378 ⋈	3597.54
1620	36	3168	1468.08	4320	2069.28	5472	2603.52	6696 ⋈	3269.88	7812 ⋈	3809.16
1710	38	3344	1549.64	4560	2184.24	5776	2748.16	7068 ⋈	3451.54	8246 ⋈	4020.78
1800	40	3520	1631.20	4800	2299.20	6080	2892.80	7440 ⋈	3633.20	8680 ⋈	4232.40
1890	42	3696	1712.76	5040	2414.16	6384 ⋈	3037.44	7812 ⋈	3814.86	9114 ⋈	4444.02
1980	44	3872	1794.32	5280	2529.12	6688 ⋈	3182.08	8184 ⋈	3996.52	9548 ⋈	4655.64
2070	46	4048	1875.88	5520	2644.08	6992 ⋈	3326.72				
2160	48	4224	1957.44	5760	2759.04	7296 ⋈	3471.36				
2250	50	4400	2039.00	6000	2874.00	7600 ⋈	3616.00				
2340	52	4576	2120.56	6240 ⋈	2988.96	7904 ⋈	3760.64				
2430	54	4752	2202.12	6480 ⋈	3103.92	8208 ⋈	3905.28				
2520	56	4928	2283.68	6720 ⋈	3218.88	8512 ⋈	4049.92				
2610	58	5104	2365.24	6960 ⋈	3333.84	8816 ⋈	4194.56				
2700	60	5280	2446.80	7200 ⋈	3448.80	9120 ⋈	4339.20				
Maximum number of elements per block		66		66		66		44		44	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

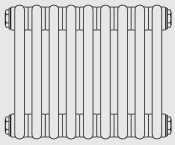
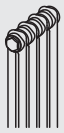
Connection surcharge (per radiator) **with built-in valve**

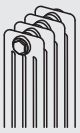
Connection system		Connection arrangement	Surcharge
31, 41, 32, and 42	Valve on side at top	69 and 89	243.66 €
		96 and 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

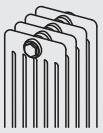
The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 1500 MM

with heat outputs depending on length and depth





Model		2150	3150	4150	5150	6150
Order number		RRN20150...2.XA	RRN30150...2.XA	RRN40150...2.XA	RRN50150...2.XA	RRN60150...2.XA
Height H	[mm]	1500	1500	1500	1500	1500
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.93	2.89	3.85	4.87	5.85
Exponent n	[ ]	1.3200	1.3500	1.3500	1.3700	1.4000
Standard heat output Φ_L	[watts/el.]	109	147	186	225	264
Price per element	[EUR/el.]	52.17	74.56	97.43	122.00	145.34

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	654	313.02	882	447.36	1116	584.58	1350	732.00	1584	872.04
360	8	872	417.36	1176	596.48	1488	779.44	1800	976.00	2112	1162.72
450	10	1090	521.70	1470	745.60	1860	974.30	2250	1220.00	2640	1453.40
540	12	1308	626.04	1764	894.72	2232	1169.16	2700	1464.00	3168	1744.08
630	14	1526	730.38	2058	1043.84	2604	1364.02	3150	1708.00	3696	2034.76
720	16	1744	834.72	2352	1192.96	2976	1558.88	3600	1952.00	4224	2325.44
810	18	1962	939.06	2646	1342.08	3348	1753.74	4050	2196.00	4752	2616.12
900	20	2180	1043.40	2940	1491.20	3720	1948.60	4500	2440.00	5280	2906.80
990	22	2398	1147.74	3234	1640.32	4092	2143.46	4950	2684.00	5808	3197.48
1080	24	2616	1252.08	3528	1789.44	4464	2338.32	5400	2928.00	6336 ⋈	3488.16
1170	26	2834	1356.42	3822	1938.56	4836	2533.18	5850	3172.00	6864 ⋈	3778.84
1260	28	3052	1460.76	4116	2087.68	5208	2728.04	6300 ⋈	3416.00	7392 ⋈	4069.52
1350	30	3270	1565.10	4410	2236.80	5580	2922.90	6750 ⋈	3660.00	7920 ⋈	4360.20
1440	32	3488	1669.44	4704	2385.92	5952	3117.76				
1530	34	3706	1773.78	4998	2535.04	6324 ⋈	3312.62				
1620	36	3924	1878.12	5292	2684.16	6696 ⋈	3507.48				
1710	38	4142	1982.46	5586	2833.28	7068 ⋈	3702.34				
1800	40	4360	2086.80	5880	2982.40	7440 ⋈	3897.20				
1890	42	4578	2191.14	6174	3131.52	7812 ⋈	4092.06				
1980	44	4796	2295.48	6468 ⋈	3280.64	8184 ⋈	4286.92				
2070	46	5014	2399.82	6762 ⋈	3429.76	8556 ⋈	4481.78				
2160	48	5232	2504.16	7056 ⋈	3578.88	8928 ⋈	4676.64				
2250	50	5450	2608.50	7350 ⋈	3728.00	9300 ⋈	4871.50				
2340	52	5668	2712.84	7644 ⋈	3877.12	9672 ⋈	5066.36				
2430	54	5886	2817.18	7938 ⋈	4026.24	10044 ⋈	5261.22				
2520	56	6104	2921.52	8232 ⋈	4175.36	10416 ⋈	5456.08				
2610	58	6322 ⋈	3025.86	8526 ⋈	4324.48	10788 ⋈	5650.94				
2700	60	6540 ⋈	3130.20	8820 ⋈	4473.60	11160 ⋈	5845.80				
Maximum number of elements per block		66		66		54		30		30	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 1800 MM

with heat outputs depending on length and depth

Model		2180	3180	4180	5180	6180
Order number		RRN20180...2.XA	RRN30180...2.XA	RRN40180...2.XA	RRN50180...2.XA	RRN60180...2.XA
Height H	[mm]	1800	1800	1800	1800	1800
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	2.29	3.43	4.58	5.78	6.95
Exponent n	[ ]	1.3200	1.3500	1.3400	1.3700	1.3900
Standard heat output Φ_L	[watts/el.]	130	173	219	263	309
Price per element	[EUR/el.]	61.66	91.97	117.06	143.52	170.44

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	780	369.96	1038	551.82	1314	702.36	1578	861.12	1854	1022.64
360	8	1040	493.28	1384	735.76	1752	936.48	2104	1148.16	2472	1363.52
450	10	1300	616.60	1730	919.70	2190	1170.60	2630	1435.20	3090	1704.40
540	12	1560	739.92	2076	1103.64	2628	1404.72	3156	1722.24	3708	2045.28
630	14	1820	863.24	2422	1287.58	3066	1638.84	3682	2009.28	4326	2386.16
720	16	2080	986.56	2768	1471.52	3504	1872.96	4208	2296.32	4944	2727.04
810	18	2340	1109.88	3114	1655.46	3942	2107.08	4734	2583.36	5562	3067.92
900	20	2600	1233.20	3460	1839.40	4380	2341.20	5260	2870.40	6180	3408.80
990	22	2860	1356.52	3806	2023.34	4818	2575.32	5786	3157.44	6798 ⋈	3749.68
1080	24	3120	1479.84	4152	2207.28	5256	2809.44	6312 ⋈	3444.48	7416 ⋈	4090.56
1170	26	3380	1603.16	4498	2391.22	5694	3043.56	6838 ⋈	3731.52	8034 ⋈	4431.44
1260	28	3640	1726.48	4844	2575.16	6132	3277.68	7364 ⋈	4018.56	8652 ⋈	4772.32
1350	30	3900	1849.80	5190	2759.10	6570 ⋈	3511.80	7890 ⋈	4305.60	9270 ⋈	5113.20
1440	32	4160	1973.12	5536	2943.04	7008 ⋈	3745.92				
1530	34	4420	2096.44	5882	3126.98	7446 ⋈	3980.04				
1620	36	4680	2219.76	6228 ⋈	3310.92	7884 ⋈	4214.16				
1710	38	4940	2343.08	6574 ⋈	3494.86	8322 ⋈	4448.28				
1800	40	5200	2466.40	6920 ⋈	3678.80	8760 ⋈	4682.40				
1890	42	5460	2589.72	7266 ⋈	3862.74	9198 ⋈	4916.52				
1980	44	5720	2713.04	7612 ⋈	4046.68	9636 ⋈	5150.64				
2070	46	5980	2836.36	7958 ⋈	4230.62	10074 ⋈	5384.76				
2160	48	6240 ⋈	2959.68	8304 ⋈	4414.56	10512 ⋈	5618.88				
2250	50	6500 ⋈	3083.00	8650 ⋈	4598.50	10950 ⋈	5853.00				
2340	52	6760 ⋈	3206.32	8996 ⋈	4782.44	11388 ⋈	6087.12				
2430	54	7020 ⋈	3329.64	9342 ⋈	4966.38	11826 ⋈	6321.24				
2520	56	7280 ⋈	3452.96	9688 ⋈	5150.32	12264 ⋈	6555.36				
2610	58	7540 ⋈	3576.28	10034 ⋈	5334.26	12702 ⋈	6789.48				
2700	60	7800 ⋈	3699.60	10380 ⋈	5518.20	13140 ⋈	7023.60				
Maximum number of elements per block		66		66		54		30		30	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

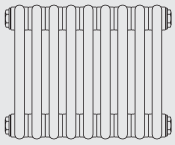
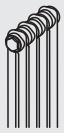
Connection surcharge (per radiator) **with built-in valve**

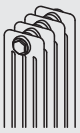
Connection system		Connection arrangement	Surcharge
31, 41, 32, and 42	Valve on side at top	69 and 89	243.66 €
		96 and 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

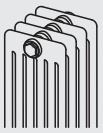
The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 2000 MM

with heat outputs depending on length and depth





Model		2200	3200	4200	5200	6200
Order number		RRN20200...2.XA	RRN30200...2.XA	RRN40200...2.XA	RRN50200...2.XA	RRN60200...2.XA
Height H	[mm]	2000	2000	2000	2000	2000
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	2.53	3.80	5.06	6.38	7.67
Exponent n	[ ]	1.3200	1.3400	1.3400	1.3700	1.3900
Standard heat output Φ_L	[watts/el.]	144	190	241	287	339
Price per element	[EUR/el.]	69.01	98.56	129.66	158.69	187.94

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	864	414.06	1140	591.36	1446	777.96	1722	952.14	2034	1127.64
360	8	1152	552.08	1520	788.48	1928	1037.28	2296	1269.52	2712	1503.52
450	10	1440	690.10	1900	985.60	2410	1296.60	2870	1586.90	3390	1879.40
540	12	1728	828.12	2280	1182.72	2892	1555.92	3444	1904.28	4068	2255.28
630	14	2016	966.14	2660	1379.84	3374	1815.24	4018	2221.66	4746	2631.16
720	16	2304	1104.16	3040	1576.96	3856	2074.56	4592	2539.04	5424	3007.04
810	18	2592	1242.18	3420	1774.08	4338	2333.88	5166	2856.42	6102	3382.92
900	20	2880	1380.20	3800	1971.20	4820	2593.20	5740	3173.80	6780 ⋈	3758.80
990	22	3168	1518.22	4180	2168.32	5302	2852.52	6314 ⋈	3491.18	7458 ⋈	4134.68
1080	24	3456	1656.24	4560	2365.44	5784	3111.84	6888 ⋈	3808.56	8136 ⋈	4510.56
1170	26	3744	1794.26	4940	2562.56	6266 ⋈	3371.16	7462 ⋈	4125.94	8814 ⋈	4886.44
1260	28	4032	1932.28	5320	2759.68	6748 ⋈	3630.48	8036 ⋈	4443.32	9492 ⋈	5262.32
1350	30	4320	2070.30	5700	2956.80	7230 ⋈	3889.80	8610 ⋈	4760.70	10170 ⋈	5638.20
1440	32	4608	2208.32	6080	3153.92	7712 ⋈	4149.12				
1530	34	4896	2346.34	6460 ⋈	3351.04	8194 ⋈	4408.44				
1620	36	5184	2484.36	6840 ⋈	3548.16	8676 ⋈	4667.76				
1710	38	5472	2622.38	7220 ⋈	3745.28	9158 ⋈	4927.08				
1800	40	5760	2760.40	7600 ⋈	3942.40	9640 ⋈	5186.40				
1890	42	6048	2898.42	7980 ⋈	4139.52	10122 ⋈	5445.72				
1980	44	6336 ⋈	3036.44	8360 ⋈	4336.64	10604 ⋈	5705.04				
2070	46	6624 ⋈	3174.46	8740 ⋈	4533.76	11086 ⋈	5964.36				
2160	48	6912 ⋈	3312.48	9120 ⋈	4730.88	11568 ⋈	6223.68				
2250	50	7200 ⋈	3450.50	9500 ⋈	4928.00	12050 ⋈	6483.00				
2340	52	7488 ⋈	3588.52	9880 ⋈	5125.12	12532 ⋈	6742.32				
2430	54	7776 ⋈	3726.54	10260 ⋈	5322.24	13014 ⋈	7001.64				
2520	56	8064 ⋈	3864.56	10640 ⋈	5519.36	13496 ⋈	7260.96				
2610	58	8352 ⋈	4002.58	11020 ⋈	5716.48	13978 ⋈	7520.28				
2700	60	8640 ⋈	4140.60	11400 ⋈	5913.60	14460 ⋈	7779.60				

Maximum number of elements per block	66	59	44	30	30
Maximum number of elements for second block / third block	22 / 22	22 / 22	22 / 22	22 / 22	22 / 22

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

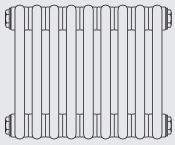
A delivery in several blocks/parts with an order number is not possible.

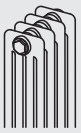
Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 2200 MM

with heat outputs depending on length and depth



Model		2220	3220	4220	5220	6220
Order number		**RRN20220...2.XA**	**RRN30220...2.XA**	**RRN40220...2.XA**	**RRN50220...2.XA**	**RRN60220...2.XA**
Height H	[mm]	2200	2200	2200	2200	2200
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	2.78	4.16	5.55	6.99	8.40
Exponent n	[ ]	1.3200	1.3400	1.3400	1.3600	1.3900
Standard heat output Φ_L	[watts/el.]	158	207	262	310	367
Price per element	[EUR/el.]	77.45	112.23	145.69	178.43	211.70

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	948	464.70	1242	673.38	1572	874.14	1860	1070.58	2202	1270.20
360	8	1264	619.60	1656	897.84	2096	1165.52	2480	1427.44	2936	1693.60
450	10	1580	774.50	2070	1122.30	2620	1456.90	3100	1784.30	3670	2117.00
540	12	1896	929.40	2484	1346.76	3144	1748.28	3720	2141.16	4404	2540.40
630	14	2212	1084.30	2898	1571.22	3668	2039.66	4340	2498.02	5138	2963.80
720	16	2528	1239.20	3312	1795.68	4192	2331.04	4960	2854.88	5872	3387.20
810	18	2844	1394.10	3726	2020.14	4716	2622.42	5580	3211.74	6606 ⋈	3810.60
900	20	3160	1549.00	4140	2244.60	5240	2913.80	6200 ⋈	3568.60	7340 ⋈	4234.00
990	22	3476	1703.90	4554	2469.06	5764	3205.18	6820 ⋈	3925.46	8074 ⋈	4657.40
1080	24	3792	1858.80	4968	2693.52	6288 ⋈	3496.56	7440 ⋈	4282.32	8808 ⋈	5080.80
1170	26	4108	2013.70	5382	2917.98	6812 ⋈	3787.94	8060 ⋈	4639.18	9542 ⋈	5504.20
1260	28	4424	2168.60	5796	3142.44	7336 ⋈	4079.32	8680 ⋈	4996.04	10276 ⋈	5927.60
1350	30	4740	2323.50	6210 ⋈	3366.90	7860 ⋈	4370.70	9300 ⋈	5352.90	11010 ⋈	6351.00
1440	32	5056	2478.40	6624 ⋈	3591.36	8384 ⋈	4662.08				
1530	34	5372	2633.30	7038 ⋈	3815.82	8908 ⋈	4953.46				
1620	36	5688	2788.20	7452 ⋈	4040.28	9432 ⋈	5244.84				
1710	38	6004	2943.10	7866 ⋈	4264.74	9956 ⋈	5536.22				
1800	40	6320 ⋈	3098.00	8280 ⋈	4489.20	10480 ⋈	5827.60				
1890	42	6636 ⋈	3252.90	8694 ⋈	4713.66	11004 ⋈	6118.98				
1980	44	6952 ⋈	3407.80	9108 ⋈	4938.12	11528 ⋈	6410.36				
2070	46	7268 ⋈	3562.70	9522 ⋈	5162.58	12052 ⋈	6701.74				
2160	48	7584 ⋈	3717.60	9936 ⋈	5387.04	12576 ⋈	6993.12				
2250	50	7900 ⋈	3872.50	10350 ⋈	5611.50	13100 ⋈	7284.50				
2340	52	8216 ⋈	4027.40	10764 ⋈	5835.96	13624 ⋈	7575.88				
2430	54	8532 ⋈	4182.30	11178 ⋈	6060.42	14148 ⋈	7867.26				
2520	56	8848 ⋈	4337.20	11592 ⋈	6284.88	14672 ⋈	8158.64				
2610	58	9164 ⋈	4492.10	12006 ⋈	6509.34	15196 ⋈	8450.02				
2700	60	9480 ⋈	4647.00	12420 ⋈	6733.80	15720 ⋈	8741.40				
Maximum number of elements per block		42		59		44		30		22	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
31, 41, 32, and 42	Valve on side at top	69 and 89	243.66 €
		96 and 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 2500 MM

with heat outputs depending on length and depth

Model		2250	3250	4250	5250	6250
Order number		**RRN20250...2.XA**	**RRN30250...2.XA**	**RRN40250...2.XA**	**RRN50250...2.XA**	**RRN60250...2.XA**
Height H	[mm]	2500	2500	2500	2500	2500
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	3.14	4.71	6.27	7.90	9.49
Exponent n	[ ]	1.3200	1.3400	1.3400	1.3600	1.3900
Standard heat output Φ_L	[watts/el.]	179	231	293	343	408
Price per element	[EUR/el.]	85.88	125.89	161.92	198.01	235.66

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	1074	515.28	1386	755.34	1758	971.52	2058	1188.06	2448	1413.96
360	8	1432	687.04	1848	1007.12	2344	1295.36	2744	1584.08	3264	1885.28
450	10	1790	858.80	2310	1258.90	2930	1619.20	3430	1980.10	4080	2356.60
540	12	2148	1030.56	2772	1510.68	3516	1943.04	4116	2376.12	4896	2827.92
630	14	2506	1202.32	3234	1762.46	4102	2266.88	4802	2772.14	5712	3299.24
720	16	2864	1374.08	3696	2014.24	4688	2590.72	5488	3168.16	6528 ⋈	3770.56
810	18	3222	1545.84	4158	2266.02	5274	2914.56	6174	3564.18	7344 ⋈	4241.88
900	20	3580	1717.60	4620	2517.80	5860	3238.40	6860 ⋈	3960.20	8160 ⋈	4713.20
990	22	3938	1889.36	5082	2769.58	6446 ⋈	3562.24	7546 ⋈	4356.22	8976 ⋈	5184.52
1080	24	4296	2061.12	5544	3021.36	7032 ⋈	3886.08	8232 ⋈	4752.24	9792 ⋈	5655.84
1170	26	4654	2232.88	6006	3273.14	7618 ⋈	4209.92	8918 ⋈	5148.26	10608 ⋈	6127.16
1260	28	5012	2404.64	6468 ⋈	3524.92	8204 ⋈	4533.76	9604 ⋈	5544.28	11424 ⋈	6598.48
1350	30	5370	2576.40	6930 ⋈	3776.70	8790 ⋈	4857.60	10290 ⋈	5940.30	12240 ⋈	7069.80
1440	32	5728	2748.16								
1530	34	6086	2919.92								
1620	36	6444 ⋈	3091.68								
1710	38	6802 ⋈	3263.44								
1800	40	7160 ⋈	3435.20								
1890	42	7518 ⋈	3606.96								
1980	44	7876 ⋈	3778.72								
2070	46	8234 ⋈	3950.48								
2160	48	8592 ⋈	4122.24								
2250	50	8950 ⋈	4294.00								
2340	52	9308 ⋈	4465.76								
2430	54	9666 ⋈	4637.52								
2520	56	10024 ⋈	4809.28								
2610	58	10382 ⋈	4981.04								
2700	60	10740 ⋈	5152.80								

Maximum number of elements per block	42	30	30	30	22
Maximum number of elements for second block / third block	22 / 22	22 / 22	22 / 22	22 / 22	22 / 22

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 2800 MM

with heat outputs depending on length and depth

Model		2280	3280	4280	5280	6280
Order number		RRN20280...2.XA	RRN30280...2.XA	RRN40280...2.XA	RRN50280...2.XA	RRN60280...2.XA
Height H	[mm]	2800	2800	2800	2800	2800
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	3.50	5.25	7.00	8.81	10.59
Exponent n	[ ]	1.3300	1.3400	1.3400	1.3500	1.3800
Standard heat output Φ_L	[watts/el.]	200	255	323	374	448
Price per element	[EUR/el.]	96.65	140.21	183.19	220.17	264.68

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	1200	579.90	1530	841.26	1938	1099.14	2244	1321.02	2688	1588.08
360	8	1600	773.20	2040	1121.68	2584	1465.52	2992	1761.36	3584	2117.44
450	10	2000	966.50	2550	1402.10	3230	1831.90	3740	2201.70	4480	2646.80
540	12	2400	1159.80	3060	1682.52	3876	2198.28	4488	2642.04	5376	3176.16
630	14	2800	1353.10	3570	1962.94	4522	2564.66	5236	3082.38	6272 ⋈	3705.52
720	16	3200	1546.40	4080	2243.36	5168	2931.04	5984	3522.72	7168 ⋈	4234.88
810	18	3600	1739.70	4590	2523.78	5814	3297.42	6732 ⋈	3963.06	8064 ⋈	4764.24
900	20	4000	1933.00	5100	2804.20	6460 ⋈	3663.80	7480 ⋈	4403.40	8960 ⋈	5293.60
990	22	4400	2126.30	5610	3084.62	7106 ⋈	4030.18	8228 ⋈	4843.74	9856 ⋈	5822.96
1080	24	4800	2319.60	6120	3365.04	7752 ⋈	4396.56	8976 ⋈	5284.08	10752 ⋈	6352.32
1170	26	5200	2512.90	6630 ⋈	3645.46	8398 ⋈	4762.94	9724 ⋈	5724.42	11648 ⋈	6881.68
1260	28	5600	2706.20	7140 ⋈	3925.88	9044 ⋈	5129.32	10472 ⋈	6164.76	12544 ⋈	7411.04
1350	30	6000	2899.50	7650 ⋈	4206.30	9690 ⋈	5495.70	11220 ⋈	6605.10	13440 ⋈	7940.40
1440	32	6400 ⋈	3092.80								
1530	34	6800 ⋈	3286.10								
1620	36	7200 ⋈	3479.40								
1710	38	7600 ⋈	3672.70								
1800	40	8000 ⋈	3866.00								
1890	42	8400 ⋈	4059.30								
1980	44	8800 ⋈	4252.60								
2070	46	9200 ⋈	4445.90								
2160	48	9600 ⋈	4639.20								
2250	50	10000 ⋈	4832.50								
2340	52	10400 ⋈	5025.80								
2430	54	10800 ⋈	5219.10								
2520	56	11200 ⋈	5412.40								
2610	58	11600 ⋈	5605.70								
2700	60	12000 ⋈	5799.00								

Maximum number of elements per block	42	30	30	26	22
Maximum number of elements for second block / third block	22 / 22	22 / 22	22 / 22	22 / 22	22 / 22

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

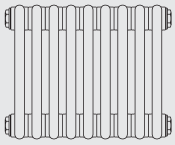
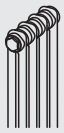
Connection surcharge (per radiator) **with built-in valve**

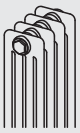
Connection system		Connection arrangement	Surcharge
31, 41, 32, and 42	Valve on side at top	69 and 89	243.66 €
		96 and 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96, 98, 05, and 07	455.15 €

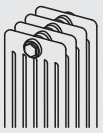
The specifications in orange font on the connection system and connection sequence are available via the order number.

PRICES AND OUTPUTS – HEIGHT OF 3000 MM

with heat outputs depending on length and depth





Model		2300	3300	4300	5300	6300
Order number		RRN20300...2.XA	RRN30300...2.XA	RRN40300...2.XA	RRN50300...2.XA	RRN60300...2.XA
Height H	[mm]	3000	3000	3000	3000	3000
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	3.75	5.62	7.49	9.42	11.31
Exponent n	[ ]	1.3300	1.3300	1.3400	1.3500	1.3800
Standard heat output Φ_L	[watts/el.]	214	270	343	394	474
Price per element	[EUR/el.]	103.26	151.78	196.14	235.66	281.81

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	1284	619.56	1620	910.68	2058	1176.84	2364	1413.96	2844	1690.86
360	8	1712	826.08	2160	1214.24	2744	1569.12	3152	1885.28	3792	2254.48
450	10	2140	1032.60	2700	1517.80	3430	1961.40	3940	2356.60	4740	2818.10
540	12	2568	1239.12	3240	1821.36	4116	2353.68	4728	2827.92	5688	3381.72
630	14	2996	1445.64	3780	2124.92	4802	2745.96	5516	3299.24	6636 ⋈	3945.34
720	16	3424	1652.16	4320	2428.48	5488	3138.24	6304 ⋈	3770.56	7584 ⋈	4508.96
810	18	3852	1858.68	4860	2732.04	6174	3530.52	7092 ⋈	4241.88	8532 ⋈	5072.58
900	20	4280	2065.20	5400	3035.60	6860 ⋈	3922.80	7880 ⋈	4713.20	9480 ⋈	5636.20
990	22	4708	2271.72	5940	3339.16	7546 ⋈	4315.08	8668 ⋈	5184.52	10428 ⋈	6199.82
1080	24	5136	2478.24	6480 ⋈	3642.72	8232 ⋈	4707.36	9456 ⋈	5655.84	11376 ⋈	6763.44
1170	26	5564	2684.76	7020 ⋈	3946.28	8918 ⋈	5099.64	10244 ⋈	6127.16	12324 ⋈	7327.06
1260	28	5992	2891.28	7560 ⋈	4249.84	9604 ⋈	5491.92	11032 ⋈	6598.48	13272 ⋈	7890.68
1350	30	6420 ⋈	3097.80	8100 ⋈	4553.40	10290 ⋈	5884.20	11820 ⋈	7069.80	14220 ⋈	8454.30
1440	32	6848 ⋈	3304.32								
1530	34	7276 ⋈	3510.84								
1620	36	7704 ⋈	3717.36								
1710	38	8132 ⋈	3923.88								
1800	40	8560 ⋈	4130.40								
1890	42	8988 ⋈	4336.92								
1980	44	9416 ⋈	4543.44								
2070	46	9844 ⋈	4749.96								
2160	48	10272 ⋈	4956.48								
2250	50	10700 ⋈	5163.00								
2340	52	11128 ⋈	5369.52								
2430	54	11556 ⋈	5576.04								
2520	56	11984 ⋈	5782.56								
2610	58	12412 ⋈	5989.08								
2700	60	12840 ⋈	6195.60								

Maximum number of elements per block	42	30	30	26	22
Maximum number of elements for second block / third block	22 / 22	22 / 22	22 / 22	22 / 22	22 / 22

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

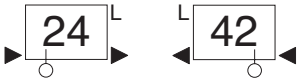
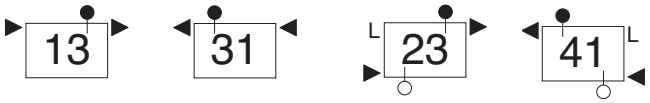
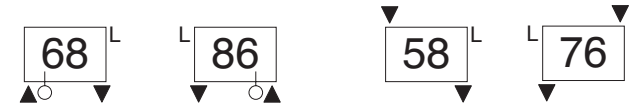
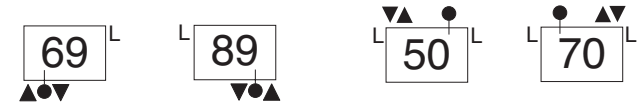
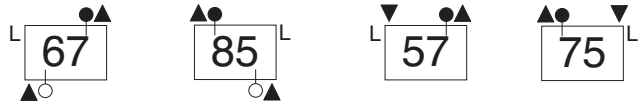
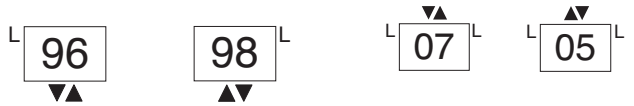
Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Scope of delivery:

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Arbonia column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

2-PIPE CONNECTIONS WITHOUT BUILT-IN VALVE

Connection system	Order code |5|	ζ value	Position ordering code |6|	Connection size	Order code |7| VL	Order code |7| RL	Surcharge per radiator [EUR]
2-pipe, laterally	2	2.5		G ⅜″ G ½″ G ¾″ G 1″			–
2-pipe, on side	2	2.5		G ⅜″ G ½″ G ¾″ G 1″			22.30
2-pipe, side	2	2.5		G ⅜″ G ½″ G ¾″ G 1″			53.65
2-pipe, from bottom, from top	2	2.5		G ⅜″ G ½″ G ¾″	38 12 34 10	38 12 34 10	113.91
2-pipe, from bottom, from top, side by side	2	2.5		G ⅜″ G ½″			
2-pipe, from bottom, from top	2	2.5		G ⅜″ G ½″ G ¾″			156.83
2-pipe, from bottom, from top, centre	2	2.5		G ½″			
Special connections – design according to drawing – ordering code |5| = 99							On request

L: recommended position for air vent connection;

○ Standard cut-off wheel; ● 100 % tight cut-off wheel

The connection options 69, 89, 50, 70, 96, 98, 07, and 05 are not possible for all lengths (see price and output tables).

Starting from a height of 1800 mm, a drain is additionally built in for process engineering reasons.

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

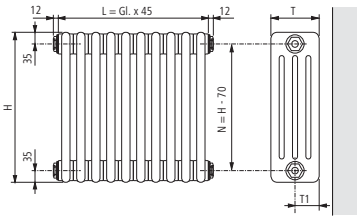
Code for the order number at position 13

R R N . . . . . 2 X A

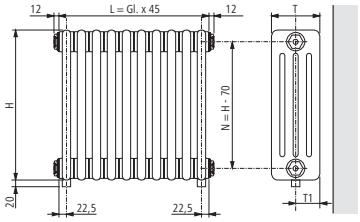
- Standard column radiator (2, 3, 4, 5, or 6 columns)
  – Note the maximum possible sizes.
- Standard column radiator without built-in valve; 2-pipe connection with 4 x ½″ connections for connection image 12, 34, 14, or 32; air vent and blanking plug are included.

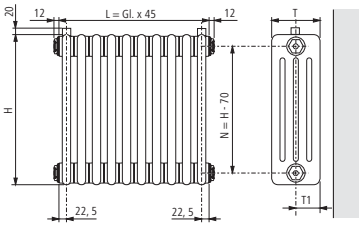
DIMENSIONAL DRAWINGS FOR STANDARD COLUMN RADIATORS

2-pipe, side

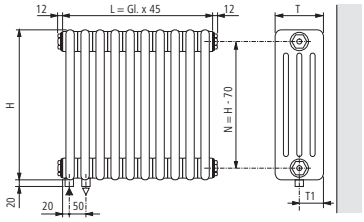


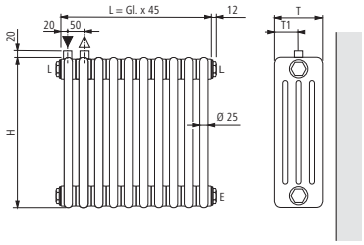
2-pipe, from bottom, from top



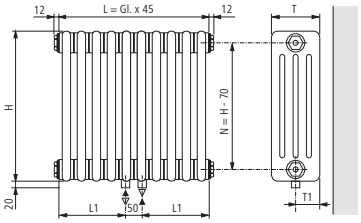


2-pipe, from bottom, from top, side by side



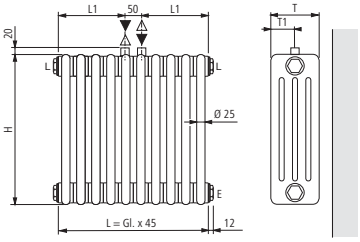


2-pipe, from bottom, centre

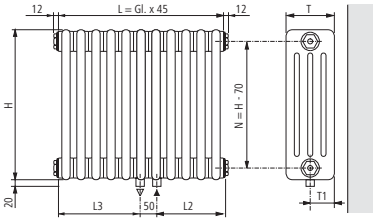


even no. of elements (96 / 98)

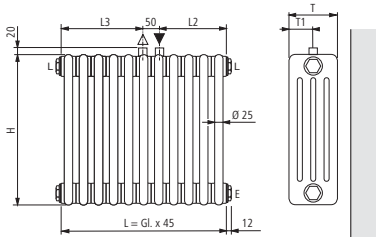
2-pipe, from top, centre



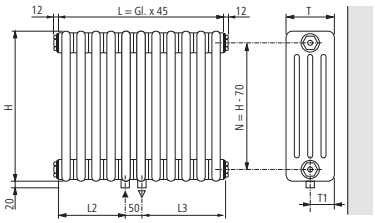
even no. of elements (05 / 07)



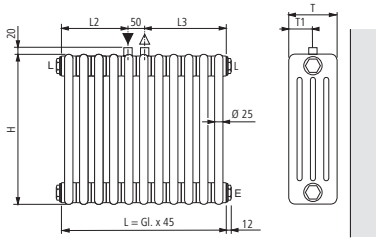
uneven no. of elements (96)



uneven no. of elements (05)



uneven no. of elements (98)



uneven no. of elements (07)

L1: ½ x el. x 45 – 25
L2: ½ x (el. – 1) x 45 – 25
L3: ½ x (el. + 1) x 45 – 25

H: height
L: length
N: hub distance

Number of columns	T [mm]	T1 [mm]
2 columns	65	32.5
3 columns	105	52.5
4 columns	145	72.5
5 columns	185	92.5
6 columns	225	112.5

2-TUBE CONNECTIONS WITH BUILT-IN VALVE

General

In this special version of the column radiator, a factory k_V-preset valve is built in.

- Maximum length like column radiators or Cambiotherm without built-in valve (see "Maximum length"):
  - Can be nippled with valve arranged at top (delivery in sub-blocks possible)
  - Cannot be nippled with valve arranged at bottom (delivered in a single piece)
- Surface finish like column radiators without built-in valve

Range available

- Factory k_V-preset built-in valve, arranged at top or bottom, right or left
- Standard connection:
  - 2-pipe connection bottom or top, on same side (on the side of the valve) or centre with hub distance 50 mm
  - Connection size: G ½" internal thread or G ¾" external thread
  - Flow welded into the 1st element, return into the 2nd element
  - For the version with valve arranged at the bottom, two air vents are provided
- Thermostatic sensor head is not included in the scope of delivery and must be ordered as an accessory
- Not available in high-pressure version

Special versions

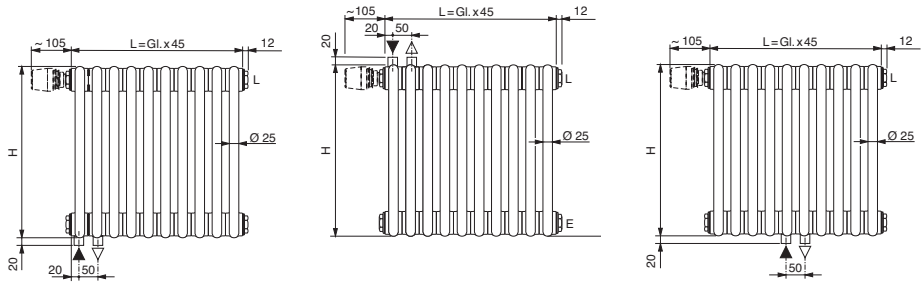
- 2-pipe connections (for valve arranged at top or bottom, on request):
  - From top, on alternating sides
- Version as nippled additional block:
  - With valve arranged at top
  - Length 2 elements
- Column radiator, angled or curved version:
  - With valve arranged at top
  - The first three elements in each case cannot be angled or bent
- In the case of a connection from the top, the heat output can be reduced

Connection system	Order code		Arrangement ordering code |6|		Conn. size	Order code |7| VL	RL	Surcharge per radiator [EUR]
2-pipe from bottom, built-in valve integrated laterally on top	31	Standard valve with M30 x 1.5 connection	69	89	G ½"	12	12	243.66
	41	Valve with fine adjustment and M30 x 1.5 connection			G ¾"	84	84	261.97
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
	31	Standard valve with M30 x 1.5 connection	98	96	G ½"	12	12	356.38
	41	Valve with fine adjustment and M30 x 1.5 connection			G ¾"	84	84	374.69
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
2-pipe from bottom, built-in valve integrated on side at bottom	61	Standard valve with M30 x 1.5 connection	69	89	G ½"	12	12	342.43
	81	Valve with fine adjustment and M30 x 1.5 connection			G ¾"	84	84	360.74
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
	61	Standard valve with M30 x 1.5 connection	98	96	G ½"	12	12	455.15
	81	Valve with fine adjustment and M30 x 1.5 connection			G ¾"	84	84	473.46
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
2-pipe from top, built-in valve integrated laterally on top	31	Standard valve with M30 x 1.5 connection	50	70	G ½"	12	12	243.66
	41	Valve with fine adjustment and M30 x 1.5 connection			G ¾"	84	84	261.97
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
2-pipe from top, built-in valve integrated laterally at bottom	61	Standard valve with M30 x 1.5 connection	50	70	G ½"	12	12	342.43
	81	Valve with fine adjustment and M30 x 1.5 connection			G ¾"	84	84	360.74
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
	61	Standard valve with M30 x 1.5 connection	07	05	G ½"	12	12	455.15
	81	Valve with fine adjustment and M30 x 1.5 connection			G ¾"	84	84	473.46
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						

L: recommended position for air vent connection; G ½": internal thread; G ¾": external thread

DIMENSIONAL DRAWINGS BUILT-IN VALVE AT TOP

Connection **(69)** at bottom laterally[1]	Connection **(50)** top laterally[1] [2]	Connection **(98)** bottom centre [3]



[1] Minimum length: 4 elements

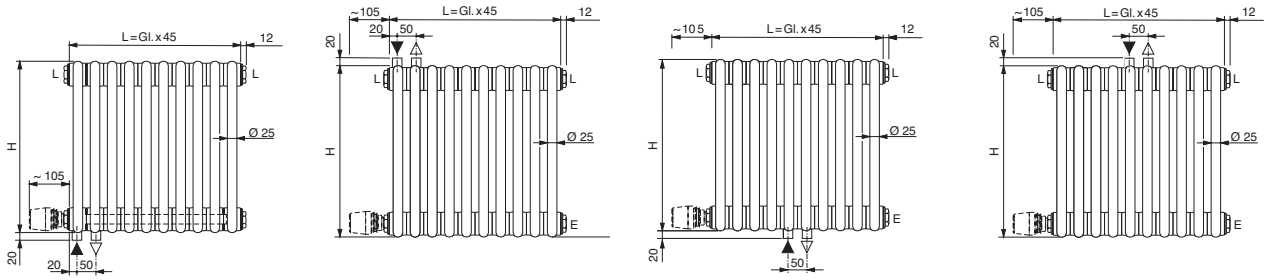
[2] For reasons of construction, there is no flow through the first element

[3] Minimum length: 8 elements

Centre connection only possible with an even number of elements (for uneven number of elements connections are offset right or left)

DIMENSIONAL DRAWINGS BUILT-IN VALVE AT BOTTOM

Connection **(69)** at bottom laterally[1] [2]	Connection **(50)** at top laterally[1]	Connection **(98)** bottom centre [3]	Connection **(07)** top centre [3]



[1] Minimum length: 4 elements

[2] For reasons of construction, there is no flow through the first element

[3] Minimum length: 8 elements

Centre connection only possible with an even number of elements (for uneven number of elements connections offset right or left)

Note:

Please note the valve performance limits in the section "General information"

For connection images 98 and 96 with built-in valve on the side at bottom, the hot-dip galvanised version is not possible.

Order standard column radiators using completely configured order numbers

Standard column radiators with up to the maximum number of elements per block can be ordered with an order number.

Standard column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

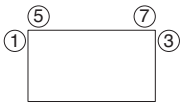
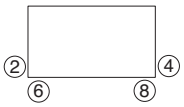
A delivery in several blocks/parts with an order number is not possible.

Code for the order number at position 13

R R V . . . . . 6 X A

- Standard column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
  - Standard column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; air vent is installed.

AIR VENT AND DRAIN

Description		Feature	Order code	Surcharge per radiator [EUR]
Air vent	**Type**			
	Air vent connection	|8|	4	–
	Built-in air vent with rotatable outlet – standard version	|8|	1	9.83
	No air vent, only if mandatory	|8|	3	–
	Position			
	Position recommended by factory – standard version [1]	|9|	–	–
	Position on request [2]	|9|		23.72
	Connection size			
	G ⅜" internal thread	|10|	38	–
	G ½" internal thread	|10|	12	–
Drain	**Type**			
	No drain, only if mandatory – standard version [3]	|11|	3	–
	Drain connection	|11|	4	–
	Position			
	Position recommended by factory – standard version [1]	|12|	–	–
	Position on request [2]	|12|		23.72
	Connection size			
	G ⅜" internal thread	|13|	38	–
	G ½" internal thread	|13|	12	–

[1] For position see diagrams for arrangement of the connections in the table "Connection options flow/return"

[2] If for technical reasons the connection cannot be placed at the desired position, it will instead be placed in the position recommended by the factory

[3] If for technical reasons a drain connection is necessary, it is built-in at the factory as standard

ARBONIA COLUMN RADIATORS:
SANO RADIATORS

In the following section, you will find:

- General, tender specifications
- Description
- Technical data
- Prices and outputs
- Connection options and dimensional drawing
- Air vent and drain

SANO RADIATORS

The Sano radiator is a special version for hospitals, retirement homes, sanatoriums, schools, children's homes, etc. The increased element spacing makes the Sano radiator especially easy to clean and hygienic.

You have made a good choice when you decide to install Arbonia Sano radiators. These beautiful, top quality, state-of-the-art products provide the comfort that a discerning developer expects: More comfort thanks to the ideal distribution of the heat through radiation and convection, more options thanks to the wide range of radiator dimensions available, but also more safety (complies with statutory accident insurance conditions), as they have no corners or sharp edges.

Special features:

- Especially easy to clean and hygienic
- A classic and timeless design
- Top in quality and comfort
- A uniquely large variety of models
- Powerful and comfortable
- High accident safety (compliant with statutory accident insurance)
- Safe and easy to install in accordance with VDI 6036

TENDER SPECIFICATIONS

Arbonia Sano radiators

2–6 columns made of steel; individual elements (length 65 mm) as a welded assembly, consisting of head pieces (band steel pressings) and round precision steel pipes. Blocks welded together from elements up to the maximum length of the delivery unit.

Ready to install with 4 threaded plugs for flow and return as well as for air vent and drain. Edges rounded on all sides with R_{min} = 2 mm.

Coating according to DIN 55900 part 1 and part 2.

Design features comply with the basic principles for the testing of the occupational safety of radiators (statutory accident insurance).

Awarded for compliance with demanding hygiene requirements by a laboratory for microbiology and hygiene.

Pressure and leak tested.

Heat output tested and registered in accordance with EN 442.

CE-compliant.

Suitable for closed water heating systems in accordance with DIN 18380 and water quality in accordance with VDI 2035, ÖNORM H5195 and SWKI BT 102-01.

Maximum permissible operating temperature: 110 °C

Max. operating pressure:

2–6 columns 10 bar / 1000 kPa

2–6 columns 16 bar / 1600 kPa (high-pressure version)

Packed safely for transport.

RANGE AVAILABLE

- 5 depths: 65–225 mm (2–6 columns)
- 20 standard heights: 260–3000 mm
- Length:
  - Calculation: (number of elements x 65 mm) – 20 mm
  - Length gradation: 65 mm (1 element)
  - Minimum length: 370 mm (6 elements)
  - Maximum length see paragraph “Maximum length”
- 2-pipe connections, at side

For Sano radiators with connections on the same end, from a certain length and height an insert pipe is supplied at an extra charge to guarantee proper water circulation.

MAXIMUM LENGTH

For reasons of weight and transport, Sano radiators can only be shipped from the factory as a single piece up to a maximum length. If the maximum length is exceeded in a single piece, the Sano radiators will be delivered in several blocks (see price tables).

These blocks will have to be coupled together on site, or if necessary at the factory. The overall length for Sano radiators is limited to three blocks.

Sano radiators in high-pressure version cannot be nippled. The overall length for the high-pressure version is thus limited to the number of elements per block.

SANO RADIATORS

The Sano radiator is a special version for hospitals, retirement homes, sanatoriums, schools, children's homes, etc. The increased element spacing makes the Sano radiator especially easy to clean and hygienic.

You have made a good choice when you decide to install Arbonia Sano radiators. These beautiful, top quality, state-of-the-art products provide the comfort that a discerning developer expects: More comfort thanks to the ideal distribution of the heat through radiation and convection, more options thanks to the wide range of radiator dimensions available, but also more safety (complies with statutory accident insurance conditions), as they have no corners or sharp edges.

Special features:

- Increased efficiency thanks to preset valves
- Especially easy to clean and hygienic
- A classic and timeless design
- Top in quality and comfort
- A uniquely large variety of models
- Powerful and comfortable
- High accident safety (compliant with statutory accident insurance)
- Safe and easy to install in accordance with VDI 6036

TENDER SPECIFICATIONS

Arbonia Sano radiators with built-in valve

2–6 columns made of steel; individual elements (length 65 mm) as a welded assembly, consisting of head pieces (band steel pressings) and round precision steel pipes. Blocks welded together from elements up to the maximum length of the delivery unit.

With integrated, adjustable valve insert. The k_v value is preset at the factory and adjusted to the heat output.

Ready to install with connections for flow and return as well as for air vent. Connection for drain optional. Edges rounded on all sides with R_{min} = 2 mm.

Coating according to DIN 55900 part 1 and part 2.

Design features comply with the basic principles for the testing of the occupational safety of radiators (statutory accident insurance).

Awarded for compliance with demanding hygiene requirements by a laboratory for microbiology and hygiene.

Pressure and leak tested.

Heat output tested and registered in accordance with EN 442.

CE-compliant.

Suitable for closed water heating systems in accordance with DIN 18380 and water quality in accordance with VDI 2035, ÖNORM H5195 and SWKI BT 102-01.

Maximum permissible operating temperature: 110 °C

Max. operating pressure:

2–6 columns 10 bar / 1000 kPa

Packed safely for transport.

RANGE AVAILABLE

- 5 depths: 65–225 mm (2–6 columns)
- 20 standard heights: 260–3000 mm
- Length:
  - Calculation: (number of elements x 65 mm) – 20 mm
  - Length gradation: 65 mm (1 element)
  - Minimum length: 370 mm (6 elements)
  - Maximum length see paragraph "Maximum length"
- Factory k_v-preset built-in valve, arranged at top or bottom, right or left
- Standard connection:
  - 2-pipe connection at bottom or top, on same side (on the side of the valve) with hub distance 50 mm
  - Connection size: G ½" internal thread
  - Flow welded into the 1st element, return into the 2nd element
  - For the version with valve arranged at the bottom, two air vents are provided
- Thermostatic sensor head is not included in the scope of delivery and must be ordered as an accessory
- Not available in high-pressure version

MAXIMUM LENGTH

For reasons of weight and transport, Sano radiators can only be shipped from the factory as a single piece up to a maximum length. If the maximum length is exceeded in a single piece, then the Sano radiators will be delivered in several blocks (see price tables).

These blocks will have to be coupled together on site, or if necessary at the factory. The overall length for Sano radiators is limited to three blocks.

Sano radiators in high-pressure version cannot be nippled. The overall length for the high-pressure version is thus limited to the number of elements per block.

TECHNICAL DATA AND PRICE PER ELEMENT – HEIGHT 260–550 MM

Height H	Depth T		Heat output EN 442				Exponent n	Ø Mass per element M	Surface per element A	Water content per element W	Standard water flow q_m	Radiation component s	Price per element
			Φ ΔT 60 K 90/70/20 °C	**$Φ_L$ ΔT 50 K 75/65/20 °C**	Φ ΔT 42 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C							
[mm]	[mm]	Model	[watt/el.]	**[watt/el.]**	[watt/el.]	[watt/el.]	[ ]	[kg/el.]	[m²/el.]	[l/el.]	[kg/h el.]	[%]	[EUR/el.]
	65	M2026	31	**25**	20	13	1.25	0.42	0.04	0.34	1.6	49	54.06
	105	M3026	41	**33**	26	17	1.31	0.63	0.07	0.48	2.2	38	61.40
260	145	M4026	53	**42**	34	21	1.30	0.84	0.09	0.63	2.8	33	67.36
	185	M5026	64	**51**	41	26	1.33	1.11	0.11	0.78	3.6	30	75.77
	225	M6026	78	**61**	49	30	1.36	1.34	0.13	0.93	4.0	27	84.22
	65	M2030	35	**28**	23	15	1.26	0.47	0.05	0.37	1.9	49	54.54
	105	M3030	47	**37**	30	19	1.33	0.70	0.08	0.53	2.7	38	61.79
300	145	M4030	60	**48**	38	24	1.33	0.93	0.10	0.69	3.4	33	68.32
	185	M5030	74	**58**	46	29	1.36	1.23	0.13	0.86	4.1	30	76.21
	225	M6030	89	**70**	55	34	1.39	1.49	0.15	1.02	4.9	27	84.65
	65	M2035	40	**32**	25	16	1.31	0.53	0.06	0.41	2.2	49	54.64
	105	M3035	55	**43**	34	21	1.36	0.79	0.09	0.59	3.1	38	61.98
350	145	M4035	70	**55**	44	27	1.35	1.06	0.12	0.77	4.0	33	69.36
	185	M5035	85	**67**	53	33	1.39	1.38	0.15	0.96	4.8	30	77.30
	225	M6035	103	**81**	63	39	1.41	1.67	0.18	1.14	5.7	27	86.05
	65	M2040	45	**36**	28	18	1.31	0.59	0.07	0.45	2.4	49	55.15
	105	M3040	62	**48**	38	24	1.36	0.88	0.10	0.65	3.5	38	62.29
400	145	M4040	79	**62**	49	31	1.35	1.18	0.13	0.85	4.5	33	70.25
	185	M5040	97	**76**	60	37	1.39	1.53	0.17	1.06	5.5	30	78.20
	225	M6040	117	**91**	72	44	1.41	1.85	0.20	1.26	6.5	27	87.54
	65	M2045	49	**39**	31	20	1.31	0.65	0.07	0.49	2.8	49	55.57
	105	M3045	68	**54**	43	27	1.36	0.97	0.11	0.71	4.0	38	62.50
450	145	M4045	88	**69**	55	34	1.35	1.30	0.15	0.93	5.0	33	71.37
	185	M5045	108	**84**	67	41	1.39	1.68	0.19	1.16	6.2	30	79.57
	225	M6045	131	**102**	80	49	1.41	2.03	0.22	1.38	7.2	27	88.68
	65	M2050	54	**43**	34	22	1.31	0.71	0.08	0.53	3.2	49	56.47
	105	M3050	75	**59**	47	29	1.36	1.06	0.12	0.77	4.4	38	63.20
500	145	M4050	97	**76**	61	38	1.35	1.42	0.17	1.01	5.6	33	72.93
	185	M5050	119	**93**	73	45	1.39	1.83	0.21	1.26	6.9	30	80.91
	225	M6050	144	**112**	88	54	1.41	2.21	0.25	1.50	8.1	27	90.24
	65	M2055	59	**47**	37	24	1.31	0.77	0.09	0.57	3.5	49	57.43
	105	M3055	82	**65**	51	32	1.36	1.16	0.14	0.83	4.7	38	64.20
550	145	M4055	106	**83**	66	41	1.35	1.54	0.18	1.09	6.1	33	74.46
	185	M5055	129	**101**	80	49	1.39	1.99	0.23	1.36	7.5	30	82.45
	225	M6055	158	**123**	97	59	1.41	2.40	0.27	1.62	8.9	27	92.47

For individual heat output calculations, see "General information"
Length calculation: length in mm = number of elements x 65 mm – 20 mm
Price calculation: price per radiator = length in elements x price per element

Note extra charge for specific connection images.

TECHNICAL DATA AND PRICE PER ELEMENT – HEIGHT 600–1500 MM

Height H	Depth T		Heat output EN 442				Exponent n	Ø Mass per element M	Surface per element A	Water content per element W	Standard water flow q_m	Radiation component s	Price per element
			Φ ΔT 60 K 90/70/20 °C	**Φ_L ΔT 50 K 75/65/20 °C**	Φ ΔT 42 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C							
[mm]	[mm]	Model	[watt/el.]	**[watt/el.]**	[watt/el.]	[watt/el.]	[ ]	[kg/el.]	[m²/el.]	[l/el.]	[kg/h el.]	[%]	[EUR/el.]
	65	M2060	63	**50**	40	26	1.31	0.83	0.10	0.61	3.8	49	58.02
	105	M3060	89	**70**	55	35	1.36	1.25	0.15	0.89	5.2	38	65.76
600	145	M4060	114	**90**	72	45	1.35	1.66	0.20	1.17	6.6	33	76.01
	185	M5060	141	**110**	87	54	1.39	2.14	0.25	1.45	8.2	30	84.22
	225	M6060	171	**133**	105	64	1.41	2.58	0.29	1.74	9.7	27	94.50
	65	M2075	77	**61**	49	31	1.31	1.02	0.12	0.73	4.7	49	61.11
	105	M3075	109	**86**	68	42	1.36	1.52	0.18	1.07	6.5	38	69.54
750	145	M4075	141	**111**	88	55	1.35	2.03	0.24	1.41	8.2	33	81.33
	185	M5075	172	**135**	107	66	1.39	2.59	0.30	1.75	10.1	30	91.59
	225	M6075	209	**163**	129	79	1.40	3.12	0.37	2.10	11.8	27	102.47
	65	M2090	91	**72**	58	37	1.31	1.20	0.15	0.84	5.8	49	84.00
	105	M3090	128	**101**	80	50	1.36	1.79	0.22	1.25	7.7	38	96.65
900	145	M4090	166	**131**	104	65	1.35	2.39	0.29	1.65	9.6	33	114.72
	185	M5090	204	**160**	126	78	1.39	3.05	0.36	2.05	11.9	30	127.41
	225	M6090	247	**193**	152	94	1.40	3.67	0.44	2.45	14.0	27	143.26
	65	M2100	100	**79**	63	40	1.32	1.32	0.16	0.92	6.3	49	85.41
	105	M3100	141	**111**	88	55	1.36	1.98	0.24	1.37	8.4	38	99.72
1000	145	M4100	183	**144**	115	72	1.35	2.63	0.32	1.81	10.7	33	119.02
	185	M5100	224	**176**	139	86	1.38	3.35	0.40	2.25	13.0	30	131.91
	225	M6100	271	**212**	167	103	1.40	4.03	0.48	2.69	15.5	27	149.01
	65	M2110	109	**87**	69	44	1.32	1.44	0.18	1.00	6.9	49	88.46
	105	M3110	155	**122**	97	61	1.35	2.16	0.27	1.49	9.2	38	105.35
1100	145	M4110	199	**157**	125	78	1.35	2.88	0.35	1.97	11.6	33	125.16
	185	M5110	245	**192**	152	94	1.38	3.65	0.44	2.45	14.2	30	142.23
	225	M6110	297	**232**	183	113	1.40	4.40	0.53	2.93	16.9	27	162.67
	65	M2120	119	**94**	75	48	1.32	1.56	0.19	1.08	7.4	49	91.59
	105	M3120	167	**132**	105	66	1.35	2.34	0.29	1.60	10.0	38	113.46
1200	145	M4120	216	**170**	135	85	1.35	3.12	0.38	2.13	12.6	33	133.30
	185	M5120	267	**209**	165	102	1.38	3.96	0.48	2.65	15.4	30	154.02
	225	M6120	321	**251**	198	122	1.40	4.76	0.58	3.17	18.0	27	174.42
	65	M2150	148	**117**	94	59	1.32	1.93	0.24	1.32	9.1	49	102.47
	105	M3150	207	**163**	130	81	1.35	2.89	0.36	1.96	12.3	38	130.04
1500	145	M4150	264	**208**	165	104	1.35	3.85	0.48	2.60	15.5	33	157.69
	185	M5150	327	**257**	204	127	1.37	4.87	0.60	3.24	18.5	30	184.55
	225	M6150	393	**307**	242	149	1.40	5.85	0.72	3.88	21.5	27	212.56

For individual heat output calculations, see "General information"
Length calculation: length in mm = number of elements x 65 mm – 20 mm
Price calculation: price per radiator = length in elements x price per element

Note extra charge for specific connection images.

TECHNICAL DATA AND PRICE PER ELEMENT – HEIGHT 1800–3000 MM

Height H	Depth T		Heat output EN 442				Exponent	Ø Mass per element	Surface per element	Water content per element	Standard water flow	Radiation component	Price per element
			Φ ΔT 60 K 90/70/20 °C	**Φ_L ΔT 50 K 75/65/20 °C**	Φ ΔT 42 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C	n	M	A	W	q_m	s	
[mm]	[mm]	Model	[watt/el.]	**[watt/el.]**	[watt/el.]	[watt/el.]	[ ]	[kg/el.]	[m²/el.]	[l/el.]	[kg/h el.]	[%]	[EUR/el.]
	65	M2180	178	**141**	113	71	1.32	2.29	0.29	1.56	10.8	49	111.76
	105	M3180	245	**193**	153	96	1.35	3.43	0.43	2.32	14.6	38	147.08
1800	145	M4180	312	**246**	196	123	1.34	4.58	0.57	3.08	18.4	33	176.79
	185	M5180	388	**305**	242	150	1.37	5.78	0.72	3.84	22.0	30	206.73
	225	M6180	461	**361**	285	176	1.39	6.95	0.86	4.60	25.5	27	238.94
	65	M2200	198	**157**	125	79	1.32	2.53	0.32	1.72	12.0	49	119.59
	105	M3200	271	**214**	170	107	1.34	3.80	0.48	2.56	16.3	38	154.38
2000	145	M4200	342	**270**	215	135	1.34	5.06	0.64	3.40	20.4	33	190.22
	185	M5200	429	**337**	267	166	1.37	6.38	0.80	4.24	24.3	30	223.01
	225	M6200	507	**397**	314	194	1.39	7.67	0.95	5.08	28.4	27	257.72
	65	M2220	221	**175**	140	88	1.32	2.78	0.35	1.88	13.2	49	127.79
	105	M3220	298	**235**	187	118	1.34	4.16	0.52	2.80	17.9	38	167.70
2200	145	M4220	374	**295**	235	148	1.34	5.55	0.70	3.72	22.4	33	206.02
	185	M5220	469	**369**	293	183	1.36	6.99	0.87	4.64	26.5	30	242.14
	225	M6220	552	**432**	341	211	1.39	8.40	1.05	5.55	31.0	27	281.17
	65	M2250	254	**201**	161	102	1.32	3.14	0.40	2.12	15.0	49	136.04
	105	M3250	337	**266**	212	133	1.34	4.71	0.59	3.16	20.3	38	181.00
2500	145	M4250	419	**331**	264	166	1.34	6.27	0.79	4.19	25.4	33	221.91
	185	M5250	530	**417**	331	206	1.36	7.90	0.99	5.23	29.8	30	261.34
	225	M6250	617	**483**	382	235	1.39	9.49	1.19	6.27	37.4	27	304.47
	65	M2280	291	**230**	184	116	1.33	3.50	0.44	2.36	16.8	49	146.70
	105	M3280	376	**297**	237	149	1.34	5.25	0.67	3.51	22.5	38	195.17
2800	145	M4280	464	**366**	292	183	1.34	7.00	0.89	4.67	28.2	33	242.69
	185	M5280	591	**466**	371	232	1.35	8.81	1.11	5.83	33.1	30	283.06
	225	M6280	680	**533**	422	261	1.38	10.59	1.33	6.99	38.6	27	332.71
	65	M2300	316	**250**	199	126	1.33	3.75	0.48	2.51	17.9	49	153.07
	105	M3300	402	**318**	254	160	1.33	5.62	0.71	3.75	24.0	38	206.28
3000	145	M4300	494	**390**	311	195	1.34	7.49	0.95	4.99	30.1	33	255.31
	185	M5300	632	**498**	396	248	1.35	9.42	1.19	6.23	35.3	30	298.16
	225	M6300	722	**566**	448	277	1.38	11.31	1.43	7.46	41.3	27	349.49

For individual heat output calculations, see "General information"
Length calculation: length in mm = number of elements x 65 mm – 20 mm
Price calculation: price per radiator = length in elements x price per element

Note extra charge for specific connection images.

PRICES AND OUTPUTS – HEIGHT OF 260 MM

with heat outputs depending on length and depth

Model		M2026	M3026	M4026	M5026	M6026
Height H	[mm]	260	260	260	260	260
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.42	0.63	0.84	1.11	1.34
Exponent n	[ ]	1.2500	1.3100	1.3000	1.3300	1.3600
Standard heat output Φ_L	[watts/el.]	25	33	42	51	61
Price per element	[EUR/el.]	54.06	61.40	67.36	75.77	84.22

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	149	324.36	197	368.40	251	404.16	306	454.62	367	505.32
500	8	198	432.48	262	491.20	334	538.88	408	606.16	489	673.76
630	10	248	540.60	328	614.00	418	673.60	510	757.70	611	842.20
760	12	298	648.72	394	736.80	502	808.32	612	909.24	733	1010.64
890	14	347	756.84	459	859.60	585	943.04	714	1060.78	855	1179.08
1020	16	397	864.96	525	982.40	669	1077.76	816	1212.32	978	1347.52
1150	18	446	973.08	590	1105.20	752	1212.48	918	1363.86	1100	1515.96
1280	20	496	1081.20	656	1228.00	836	1347.20	1020	1515.40	1222	1684.40
1410	22	546	1189.32	722	1350.80	920	1481.92	1122	1666.94	1344	1852.84
1540	24	595	1297.44	787	1473.60	1003	1616.64	1224	1818.48	1466	2021.28
1670	26	645	1405.56	853	1596.40	1087	1751.36	1326	1970.02	1589	2189.72
1800	28	694	1513.68	918	1719.20	1170	1886.08	1428	2121.56	1711	2358.16
1930	30	744	1621.80	984	1842.00	1254	2020.80	1530	2273.10	1833	2526.60
2060	32	794	1729.92	1050	1964.80	1338	2155.52	1632	2424.64	1955	2695.04
2190	34	843	1838.04	1115	2087.60	1421	2290.24	1734	2576.18	2077	2863.48
2320	36	893	1946.16	1181	2210.40	1505	2424.96	1836	2727.72	2200	3031.92
2450	38	942	2054.28	1246	2333.20	1588	2559.68	1938	2879.26	2322	3200.36
2580	40	992	2162.40	1312	2456.00	1672	2694.40	2040	3030.80	2444	3368.80
2710	42	1042	2270.52	1378	2578.80	1756	2829.12	2142	3182.34	2566	3537.24
2840	44	1091	2378.64	1443	2701.60	1839	2963.84	2244	3333.88	2688	3705.68
2970	46	1141	2486.76	1509	2824.40	1923	3098.56	2346	3485.42	2811	3874.12
3100	48	1190	2594.88	1574	2947.20	2006	3233.28	2448	3636.96	2933	4042.56
3230	50	1240	2703.00	1640	3070.00	2090	3368.00	2550	3788.50	3055	4211.00
3360	52	1290	2811.12	1706	3192.80	2174	3502.72	2652	3940.04	3177	4379.44
3490	54	1339	2919.24	1771	3315.60	2257	3637.44	2754	4091.58	3299	4547.88
3620	56	1389	3027.36	1837	3438.40	2341	3772.16	2856	4243.12	3422	4716.32
3750	58	1438	3135.48	1902	3561.20	2424	3906.88	2958	4394.66	3544	4884.76
3880	60	1488	3243.60	1968	3684.00	2508	4041.60	3060	4546.20	3666	5053.20
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

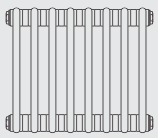
Connection surcharge (per radiator) **with built-in valve**

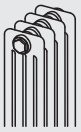
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 300 MM

with heat outputs depending on length and depth



Model		M2030	M3030	M4030	M5030	M6030
Height H	[mm]	300	300	300	300	300
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.47	0.70	0.93	1.23	1.49
Exponent n	[ ]	1.2600	1.3300	1.3300	1.3600	1.3900
Standard heat output Φ_L	[watts/el.]	28	37	48	58	70
Price per element	[EUR/el.]	54.54	61.79	68.32	76.21	84.65

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	167	327.24	224	370.74	286	409.92	349	457.26	419	507.90
500	8	223	436.32	298	494.32	382	546.56	465	609.68	558	677.20
630	10	279	545.40	373	617.90	477	683.20	581	762.10	698	846.50
760	12	335	654.48	448	741.48	572	819.84	697	914.52	838	1015.80
890	14	391	763.56	522	865.06	668	956.48	813	1066.94	977	1185.10
1020	16	446	872.64	597	988.64	763	1093.12	930	1219.36	1117	1354.40
1150	18	502	981.72	671	1112.22	859	1229.76	1046	1371.78	1256	1523.70
1280	20	558	1090.80	746	1235.80	954	1366.40	1162	1524.20	1396	1693.00
1410	22	614	1199.88	821	1359.38	1049	1503.04	1278	1676.62	1536	1862.30
1540	24	670	1308.96	895	1482.96	1145	1639.68	1394	1829.04	1675	2031.60
1670	26	725	1418.04	970	1606.54	1240	1776.32	1511	1981.46	1815	2200.90
1800	28	781	1527.12	1044	1730.12	1336	1912.96	1627	2133.88	1954	2370.20
1930	30	837	1636.20	1119	1853.70	1431	2049.60	1743	2286.30	2094	2539.50
2060	32	893	1745.28	1194	1977.28	1526	2186.24	1859	2438.72	2234	2708.80
2190	34	949	1854.36	1268	2100.86	1622	2322.88	1975	2591.14	2373	2878.10
2320	36	1004	1963.44	1343	2224.44	1717	2459.52	2092	2743.56	2513	3047.40
2450	38	1060	2072.52	1417	2348.02	1813	2596.16	2208	2895.98	2652	3216.70
2580	40	1116	2181.60	1492	2471.60	1908	2732.80	2324	3048.40	2792	3386.00
2710	42	1172	2290.68	1567	2595.18	2003	2869.44	2440	3200.82	2932	3555.30
2840	44	1228	2399.76	1641	2718.76	2099	3006.08	2556	3353.24	3071	3724.60
2970	46	1283	2508.84	1716	2842.34	2194	3142.72	2673	3505.66	3211	3893.90
3100	48	1339	2617.92	1790	2965.92	2290	3279.36	2789	3658.08	3350	4063.20
3230	50	1395	2727.00	1865	3089.50	2385	3416.00	2905	3810.50	3490	4232.50
3360	52	1451	2836.08	1940	3213.08	2480	3552.64	3021	3962.92	3630	4401.80
3490	54	1507	2945.16	2014	3336.66	2576	3689.28	3137	4115.34	3769	4571.10
3620	56	1562	3054.24	2089	3460.24	2671	3825.92	3254	4267.76	3909	4740.40
3750	58	1618	3163.32	2163	3583.82	2767	3962.56	3370	4420.18	4048	4909.70
3880	60	1674	3272.40	2238	3707.40	2862	4099.20	3486	4572.60	4188	5079.00
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 350 MM

with heat outputs depending on length and depth

Model		M2035	M3035	M4035	M5035	M6035
Height H	[mm]	350	350	350	350	350
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.53	0.79	1.06	1.38	1.67
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	32	43	55	67	81
Price per element	[EUR/el.]	54.64	61.98	69.36	77.30	86.05

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	190	327.84	257	371.88	329	416.16	401	463.80	484	516.30
500	8	254	437.12	343	495.84	439	554.88	535	618.40	645	688.40
630	10	317	546.40	429	619.80	549	693.60	669	773.00	806	860.50
760	12	380	655.68	515	743.76	659	832.32	803	927.60	967	1032.60
890	14	444	764.96	601	867.72	769	971.04	937	1082.20	1128	1204.70
1020	16	507	874.24	686	991.68	878	1109.76	1070	1236.80	1290	1376.80
1150	18	571	983.52	772	1115.64	988	1248.48	1204	1391.40	1451	1548.90
1280	20	634	1092.80	858	1239.60	1098	1387.20	1338	1546.00	1612	1721.00
1410	22	697	1202.08	944	1363.56	1208	1525.92	1472	1700.60	1773	1893.10
1540	24	761	1311.36	1030	1487.52	1318	1664.64	1606	1855.20	1934	2065.20
1670	26	824	1420.64	1115	1611.48	1427	1803.36	1739	2009.80	2096	2237.30
1800	28	888	1529.92	1201	1735.44	1537	1942.08	1873	2164.40	2257	2409.40
1930	30	951	1639.20	1287	1859.40	1647	2080.80	2007	2319.00	2418	2581.50
2060	32	1014	1748.48	1373	1983.36	1757	2219.52	2141	2473.60	2579	2753.60
2190	34	1078	1857.76	1459	2107.32	1867	2358.24	2275	2628.20	2740	2925.70
2320	36	1141	1967.04	1544	2231.28	1976	2496.96	2408	2782.80	2902	3097.80
2450	38	1205	2076.32	1630	2355.24	2086	2635.68	2542	2937.40	3063	3269.90
2580	40	1268	2185.60	1716	2479.20	2196	2774.40	2676	3092.00	3224	3442.00
2710	42	1331	2294.88	1802	2603.16	2306	2913.12	2810	3246.60	3385	3614.10
2840	44	1395	2404.16	1888	2727.12	2416	3051.84	2944	3401.20	3546	3786.20
2970	46	1458	2513.44	1973	2851.08	2525	3190.56	3077	3555.80	3708	3958.30
3100	48	1522	2622.72	2059	2975.04	2635	3329.28	3211	3710.40	3869	4130.40
3230	50	1585	2732.00	2145	3099.00	2745	3468.00	3345	3865.00	4030	4302.50
3360	52	1648	2841.28	2231	3222.96	2855	3606.72	3479	4019.60	4191	4474.60
3490	54	1712	2950.56	2317	3346.92	2965	3745.44	3613	4174.20	4352	4646.70
3620	56	1775	3059.84	2402	3470.88	3074	3884.16	3746	4328.80	4514	4818.80
3750	58	1839	3169.12	2488	3594.84	3184	4022.88	3880	4483.40	4675	4990.90
3880	60	1902	3278.40	2574	3718.80	3294	4161.60	4014	4638.00	4836	5163.00
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

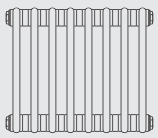
Connection surcharge (per radiator) **with built-in valve**

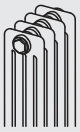
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 400 MM

with heat outputs depending on length and depth



Model		M2040	M3040	M4040	M5040	M6040
Height H	[mm]	400	400	400	400	400
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.59	0.88	1.18	1.53	1.85
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	36	48	62	76	91
Price per element	[EUR/el.]	55.15	62.29	70.25	78.20	87.54

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	213	330.90	290	373.74	373	421.50	454	469.20	547	525.24
500	8	284	441.20	387	498.32	497	562.00	605	625.60	730	700.32
630	10	355	551.50	484	622.90	621	702.50	756	782.00	912	875.40
760	12	426	661.80	581	747.48	745	843.00	907	938.40	1094	1050.48
890	14	497	772.10	678	872.06	869	983.50	1058	1094.80	1277	1225.56
1020	16	568	882.40	774	996.64	994	1124.00	1210	1251.20	1459	1400.64
1150	18	639	992.70	871	1121.22	1118	1264.50	1361	1407.60	1642	1575.72
1280	20	710	1103.00	968	1245.80	1242	1405.00	1512	1564.00	1824	1750.80
1410	22	781	1213.30	1065	1370.38	1366	1545.50	1663	1720.40	2006	1925.88
1540	24	852	1323.60	1162	1494.96	1490	1686.00	1814	1876.80	2189	2100.96
1670	26	923	1433.90	1258	1619.54	1615	1826.50	1966	2033.20	2371	2276.04
1800	28	994	1544.20	1355	1744.12	1739	1967.00	2117	2189.60	2554	2451.12
1930	30	1065	1654.50	1452	1868.70	1863	2107.50	2268	2346.00	2736	2626.20
2060	32	1136	1764.80	1549	1993.28	1987	2248.00	2419	2502.40	2918	2801.28
2190	34	1207	1875.10	1646	2117.86	2111	2388.50	2570	2658.80	3101	2976.36
2320	36	1278	1985.40	1742	2242.44	2236	2529.00	2722	2815.20	3283	3151.44
2450	38	1349	2095.70	1839	2367.02	2360	2669.50	2873	2971.60	3466	3326.52
2580	40	1420	2206.00	1936	2491.60	2484	2810.00	3024	3128.00	3648	3501.60
2710	42	1491	2316.30	2033	2616.18	2608	2950.50	3175	3284.40	3830	3676.68
2840	44	1562	2426.60	2130	2740.76	2732	3091.00	3326	3440.80	4013	3851.76
2970	46	1633	2536.90	2226	2865.34	2857	3231.50	3478	3597.20	4195	4026.84
3100	48	1704	2647.20	2323	2989.92	2981	3372.00	3629	3753.60	4378	4201.92
3230	50	1775	2757.50	2420	3114.50	3105	3512.50	3780	3910.00	4560	4377.00
3360	52	1846	2867.80	2517	3239.08	3229	3653.00	3931	4066.40	4742	4552.08
3490	54	1917	2978.10	2614	3363.66	3353	3793.50	4082	4222.80	4925	4727.16
3620	56	1988	3088.40	2710	3488.24	3478	3934.00	4234	4379.20	5107	4902.24
3750	58	2059	3198.70	2807	3612.82	3602	4074.50	4385	4535.60	5290	5077.32
3880	60	2130	3309.00	2904	3737.40	3726	4215.00	4536	4692.00	5472	5252.40
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

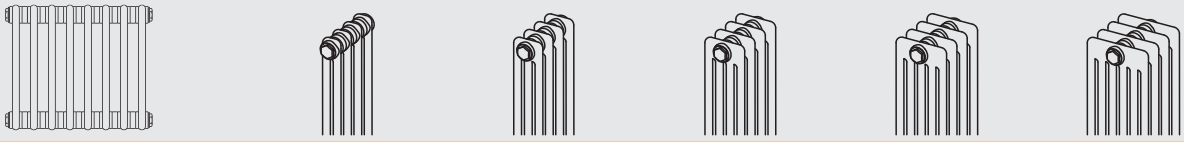
Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 450 MM

with heat outputs depending on length and depth



Model		M2045	M3045	M4045	M5045	M6045
Height H	[mm]	450	450	450	450	450
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.65	0.97	1.30	1.68	2.03
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	39	54	69	84	102
Price per element	[EUR/el.]	55.57	62.50	71.37	79.57	88.68

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	235	333.42	323	375.00	415	428.22	506	477.42	612	532.08
500	8	314	444.56	430	500.00	554	570.96	674	636.56	816	709.44
630	10	392	555.70	538	625.00	692	713.70	843	795.70	1020	886.80
760	12	470	666.84	646	750.00	830	856.44	1012	954.84	1224	1064.16
890	14	549	777.98	753	875.00	969	999.18	1180	1113.98	1428	1241.52
1020	16	627	889.12	861	1000.00	1107	1141.92	1349	1273.12	1632	1418.88
1150	18	706	1000.26	968	1125.00	1246	1284.66	1517	1432.26	1836	1596.24
1280	20	784	1111.40	1076	1250.00	1384	1427.40	1686	1591.40	2040	1773.60
1410	22	862	1222.54	1184	1375.00	1522	1570.14	1855	1750.54	2244	1950.96
1540	24	941	1333.68	1291	1500.00	1661	1712.88	2023	1909.68	2448	2128.32
1670	26	1019	1444.82	1399	1625.00	1799	1855.62	2192	2068.82	2652	2305.68
1800	28	1098	1555.96	1506	1750.00	1938	1998.36	2360	2227.96	2856	2483.04
1930	30	1176	1667.10	1614	1875.00	2076	2141.10	2529	2387.10	3060	2660.40
2060	32	1254	1778.24	1722	2000.00	2214	2283.84	2698	2546.24	3264	2837.76
2190	34	1333	1889.38	1829	2125.00	2353	2426.58	2866	2705.38	3468	3015.12
2320	36	1411	2000.52	1937	2250.00	2491	2569.32	3035	2864.52	3672	3192.48
2450	38	1490	2111.66	2044	2375.00	2630	2712.06	3203	3023.66	3876	3369.84
2580	40	1568	2222.80	2152	2500.00	2768	2854.80	3372	3182.80	4080	3547.20
2710	42	1646	2333.94	2260	2625.00	2906	2997.54	3541	3341.94	4284	3724.56
2840	44	1725	2445.08	2367	2750.00	3045	3140.28	3709	3501.08	4488	3901.92
2970	46	1803	2556.22	2475	2875.00	3183	3283.02	3878	3660.22	4692	4079.28
3100	48	1882	2667.36	2582	3000.00	3322	3425.76	4046	3819.36	4896	4256.64
3230	50	1960	2778.50	2690	3125.00	3460	3568.50	4215	3978.50	5100	4434.00
3360	52	2038	2889.64	2798	3250.00	3598	3711.24	4384	4137.64	5304	4611.36
3490	54	2117	3000.78	2905	3375.00	3737	3853.98	4552	4296.78	5508	4788.72
3620	56	2195	3111.92	3013	3500.00	3875	3996.72	4721	4455.92	5712	4966.08
3750	58	2274	3223.06	3120	3625.00	4014	4139.46	4889	4615.06	5916	5143.44
3880	60	2352	3334.20	3228	3750.00	4152	4282.20	5058	4774.20	6120	5320.80
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

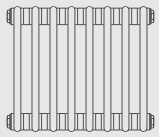
Connection surcharge (per radiator) **with built-in valve**

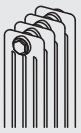
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 500 MM

with heat outputs depending on length and depth



Model		M2050	M3050	M4050	M5050	M6050
Height H	[mm]	500	500	500	500	500
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.71	1.06	1.42	1.83	2.21
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	43	59	76	93	112
Price per element	[EUR/el.]	56.47	63.20	72.93	80.91	90.24

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	257	338.82	355	379.20	457	437.58	557	485.46	672	541.44
500	8	343	451.76	473	505.60	610	583.44	742	647.28	896	721.92
630	10	429	564.70	591	632.00	762	729.30	928	809.10	1120	902.40
760	12	515	677.64	709	758.40	914	875.16	1114	970.92	1344	1082.88
890	14	601	790.58	827	884.80	1067	1021.02	1299	1132.74	1568	1263.36
1020	16	686	903.52	946	1011.20	1219	1166.88	1485	1294.56	1792	1443.84
1150	18	772	1016.46	1064	1137.60	1372	1312.74	1670	1456.38	2016	1624.32
1280	20	858	1129.40	1182	1264.00	1524	1458.60	1856	1618.20	2240	1804.80
1410	22	944	1242.34	1300	1390.40	1676	1604.46	2042	1780.02	2464	1985.28
1540	24	1030	1355.28	1418	1516.80	1829	1750.32	2227	1941.84	2688	2165.76
1670	26	1115	1468.22	1537	1643.20	1981	1896.18	2413	2103.66	2912	2346.24
1800	28	1201	1581.16	1655	1769.60	2134	2042.04	2598	2265.48	3136	2526.72
1930	30	1287	1694.10	1773	1896.00	2286	2187.90	2784	2427.30	3360	2707.20
2060	32	1373	1807.04	1891	2022.40	2438	2333.76	2970	2589.12	3584	2887.68
2190	34	1459	1919.98	2009	2148.80	2591	2479.62	3155	2750.94	3808	3068.16
2320	36	1544	2032.92	2128	2275.20	2743	2625.48	3341	2912.76	4032	3248.64
2450	38	1630	2145.86	2246	2401.60	2896	2771.34	3526	3074.58	4256	3429.12
2580	40	1716	2258.80	2364	2528.00	3048	2917.20	3712	3236.40	4480	3609.60
2710	42	1802	2371.74	2482	2654.40	3200	3063.06	3898	3398.22	4704	3790.08
2840	44	1888	2484.68	2600	2780.80	3353	3208.92	4083	3560.04	4928	3970.56
2970	46	1973	2597.62	2719	2907.20	3505	3354.78	4269	3721.86	5152	4151.04
3100	48	2059	2710.56	2837	3033.60	3658	3500.64	4454	3883.68	5376	4331.52
3230	50	2145	2823.50	2955	3160.00	3810	3646.50	4640	4045.50	5600	4512.00
3360	52	2231	2936.44	3073	3286.40	3962	3792.36	4826	4207.32	5824	4692.48
3490	54	2317	3049.38	3191	3412.80	4115	3938.22	5011	4369.14	6048	4872.96
3620	56	2402	3162.32	3310	3539.20	4267	4084.08	5197	4530.96	6272	5053.44
3750	58	2488	3275.26	3428	3665.60	4420	4229.94	5382	4692.78	6496	5233.92
3880	60	2574	3388.20	3546	3792.00	4572	4375.80	5568	4854.60	6720	5414.40
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

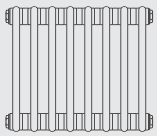
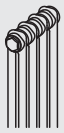
Connection surcharge (per radiator) **with built-in valve**

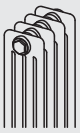
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 550 MM

with heat outputs depending on length and depth



Model		M2055	M3055	M4055	M5055	M6055
Height H	[mm]	550	550	550	550	550
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.77	1.16	1.54	1.99	2.40
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	47	65	83	101	123
Price per element	[EUR/el.]	57.43	64.20	74.46	82.45	92.47

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	279	344.58	387	385.20	499	446.76	606	494.70	738	554.82
500	8	372	459.44	516	513.60	666	595.68	808	659.60	984	739.76
630	10	465	574.30	645	642.00	832	744.60	1010	824.50	1230	924.70
760	12	558	689.16	774	770.40	998	893.52	1212	989.40	1476	1109.64
890	14	651	804.02	903	898.80	1165	1042.44	1414	1154.30	1722	1294.58
1020	16	744	918.88	1032	1027.20	1331	1191.36	1616	1319.20	1968	1479.52
1150	18	837	1033.74	1161	1155.60	1498	1340.28	1818	1484.10	2214	1664.46
1280	20	930	1148.60	1290	1284.00	1664	1489.20	2020	1649.00	2460	1849.40
1410	22	1023	1263.46	1419	1412.40	1830	1638.12	2222	1813.90	2706	2034.34
1540	24	1116	1378.32	1548	1540.80	1997	1787.04	2424	1978.80	2952	2219.28
1670	26	1209	1493.18	1677	1669.20	2163	1935.96	2626	2143.70	3198	2404.22
1800	28	1302	1608.04	1806	1797.60	2330	2084.88	2828	2308.60	3444	2589.16
1930	30	1395	1722.90	1935	1926.00	2496	2233.80	3030	2473.50	3690	2774.10
2060	32	1488	1837.76	2064	2054.40	2662	2382.72	3232	2638.40	3936	2959.04
2190	34	1581	1952.62	2193	2182.80	2829	2531.64	3434	2803.30	4182	3143.98
2320	36	1674	2067.48	2322	2311.20	2995	2680.56	3636	2968.20	4428	3328.92
2450	38	1767	2182.34	2451	2439.60	3162	2829.48	3838	3133.10	4674	3513.86
2580	40	1860	2297.20	2580	2568.00	3328	2978.40	4040	3298.00	4920	3698.80
2710	42	1953	2412.06	2709	2696.40	3494	3127.32	4242	3462.90	5166	3883.74
2840	44	2046	2526.92	2838	2824.80	3661	3276.24	4444	3627.80	5412	4068.68
2970	46	2139	2641.78	2967	2953.20	3827	3425.16	4646	3792.70	5658	4253.62
3100	48	2232	2756.64	3096	3081.60	3994	3574.08	4848	3957.60	5904	4438.56
3230	50	2325	2871.50	3225	3210.00	4160	3723.00	5050	4122.50	6150	4623.50
3360	52	2418	2986.36	3354	3338.40	4326	3871.92	5252	4287.40	6396	4808.44
3490	54	2511	3101.22	3483	3466.80	4493	4020.84	5454	4452.30	6642	4993.38
3620	56	2604	3216.08	3612	3595.20	4659	4169.76	5656	4617.20	6888	5178.32
3750	58	2697	3330.94	3741	3723.60	4826	4318.68	5858	4782.10	7134	5363.26
3880	60	2790	3445.80	3870	3852.00	4992	4467.60	6060	4947.00	7380	5548.20
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

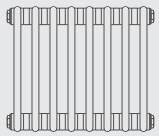
Connection surcharge (per radiator) **with built-in valve**

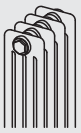
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 600 MM

with heat outputs depending on length and depth



Model		M2060	M3060	M4060	M5060	M6060
Height H	[mm]	600	600	600	600	600
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.83	1.25	1.66	2.14	2.58
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4100
Standard heat output Φ_L	[watts/el.]	50	70	90	110	133
Price per element	[EUR/el.]	58.02	65.76	76.01	84.22	94.50

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	301	348.12	419	394.56	541	456.06	660	505.32	798	567.00
500	8	402	464.16	558	526.08	721	608.08	880	673.76	1064	756.00
630	10	502	580.20	698	657.60	901	760.10	1100	842.20	1330	945.00
760	12	602	696.24	838	789.12	1081	912.12	1320	1010.64	1596	1134.00
890	14	703	812.28	977	920.64	1261	1064.14	1540	1179.08	1862	1323.00
1020	16	803	928.32	1117	1052.16	1442	1216.16	1760	1347.52	2128	1512.00
1150	18	904	1044.36	1256	1183.68	1622	1368.18	1980	1515.96	2394	1701.00
1280	20	1004	1160.40	1396	1315.20	1802	1520.20	2200	1684.40	2660	1890.00
1410	22	1104	1276.44	1536	1446.72	1982	1672.22	2420	1852.84	2926	2079.00
1540	24	1205	1392.48	1675	1578.24	2162	1824.24	2640	2021.28	3192	2268.00
1670	26	1305	1508.52	1815	1709.76	2343	1976.26	2860	2189.72	3458	2457.00
1800	28	1406	1624.56	1954	1841.28	2523	2128.28	3080	2358.16	3724	2646.00
1930	30	1506	1740.60	2094	1972.80	2703	2280.30	3300	2526.60	3990	2835.00
2060	32	1606	1856.64	2234	2104.32	2883	2432.32	3520	2695.04	4256	3024.00
2190	34	1707	1972.68	2373	2235.84	3063	2584.34	3740	2863.48	4522	3213.00
2320	36	1807	2088.72	2513	2367.36	3244	2736.36	3960	3031.92	4788	3402.00
2450	38	1908	2204.76	2652	2498.88	3424	2888.38	4180	3200.36	5054	3591.00
2580	40	2008	2320.80	2792	2630.40	3604	3040.40	4400	3368.80	5320	3780.00
2710	42	2108	2436.84	2932	2761.92	3784	3192.42	4620	3537.24	5586	3969.00
2840	44	2209	2552.88	3071	2893.44	3964	3344.44	4840	3705.68	5852	4158.00
2970	46	2309	2668.92	3211	3024.96	4145	3496.46	5060	3874.12	6118	4347.00
3100	48	2410	2784.96	3350	3156.48	4325	3648.48	5280	4042.56	6384	4536.00
3230	50	2510	2901.00	3490	3288.00	4505	3800.50	5500	4211.00	6650	4725.00
3360	52	2610	3017.04	3630	3419.52	4685	3952.52	5720	4379.44	6916	4914.00
3490	54	2711	3133.08	3769	3551.04	4865	4104.54	5940	4547.88	7182	5103.00
3620	56	2811	3249.12	3909	3682.56	5046	4256.56	6160	4716.32	7448	5292.00
3750	58	2912	3365.16	4048	3814.08	5226	4408.58	6380	4884.76	7714	5481.00
3880	60	3012	3481.20	4188	3945.60	5406	4560.60	6600	5053.20	7980	5670.00
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

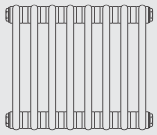
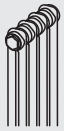
Connection surcharge (per radiator) **with built-in valve**

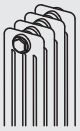
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 750 MM

with heat outputs depending on length and depth



Model		M2075	M3075	M4075	M5075	M6075
Height H	[mm]	750	750	750	750	750
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.02	1.52	2.03	2.59	3.12
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4000
Standard heat output Φ_L	[watts/el.]	61	86	111	135	163
Price per element	[EUR/el.]	61.11	69.54	81.33	91.59	102.47

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	366	366.66	513	417.24	666	487.98	810	549.54	978	614.82
500	8	488	488.88	684	556.32	888	650.64	1080	732.72	1304	819.76
630	10	610	611.10	855	695.40	1110	813.30	1350	915.90	1630	1024.70
760	12	732	733.32	1026	834.48	1332	975.96	1620	1099.08	1956	1229.64
890	14	854	855.54	1197	973.56	1554	1138.62	1890	1282.26	2282	1434.58
1020	16	976	977.76	1368	1112.64	1776	1301.28	2160	1465.44	2608	1639.52
1150	18	1098	1099.98	1539	1251.72	1998	1463.94	2430	1648.62	2934	1844.46
1280	20	1220	1222.20	1710	1390.80	2220	1626.60	2700	1831.80	3260	2049.40
1410	22	1342	1344.42	1881	1529.88	2442	1789.26	2970	2014.98	3586	2254.34
1540	24	1464	1466.64	2052	1668.96	2664	1951.92	3240	2198.16	3912	2459.28
1670	26	1586	1588.86	2223	1808.04	2886	2114.58	3510	2381.34	4238	2664.22
1800	28	1708	1711.08	2394	1947.12	3108	2277.24	3780	2564.52	4564	2869.16
1930	30	1830	1833.30	2565	2086.20	3330	2439.90	4050	2747.70	4890	3074.10
2060	32	1952	1955.52	2736	2225.28	3552	2602.56	4320	2930.88	5216	3279.04
2190	34	2074	2077.74	2907	2364.36	3774	2765.22	4590	3114.06	5542	3483.98
2320	36	2196	2199.96	3078	2503.44	3996	2927.88	4860	3297.24	5868	3688.92
2450	38	2318	2322.18	3249	2642.52	4218	3090.54	5130	3480.42	6194	3893.86
2580	40	2440	2444.40	3420	2781.60	4440	3253.20	5400	3663.60	6520 ⋈	4098.80
2710	42	2562	2566.62	3591	2920.68	4662	3415.86	5670	3846.78	6846 ⋈	4303.74
2840	44	2684	2688.84	3762	3059.76	4884	3578.52	5940	4029.96	7172 ⋈	4508.68
2970	46	2806	2811.06	3933	3198.84	5106	3741.18	6210 ⋈	4213.14	7498 ⋈	4713.62
3100	48	2928	2933.28	4104	3337.92	5328	3903.84	6480 ⋈	4396.32	7824 ⋈	4918.56
3230	50	3050	3055.50	4275	3477.00	5550	4066.50	6750 ⋈	4579.50	8150 ⋈	5123.50
3360	52	3172	3177.72	4446	3616.08	5772	4229.16	7020 ⋈	4762.68	8476 ⋈	5328.44
3490	54	3294	3299.94	4617	3755.16	5994	4391.82	7290 ⋈	4945.86	8802 ⋈	5533.38
3620	56	3416	3422.16	4788	3894.24	6216	4554.48	7560 ⋈	5129.04	9128 ⋈	5738.32
3750	58	3538	3544.38	4959	4033.32	6438	4717.14	7830 ⋈	5312.22	9454 ⋈	5943.26
3880	60	3660	3666.60	5130	4172.40	6660	4879.80	8100 ⋈	5495.40	9780 ⋈	6148.20
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

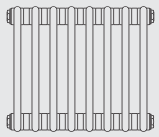
Connection surcharge (per radiator) **with built-in valve**

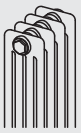
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 900 MM

with heat outputs depending on length and depth



Model		M2090	M3090	M4090	M5090	M6090
Height H	[mm]	900	900	900	900	900
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.20	1.79	2.39	3.05	3.67
Exponent n	[ ]	1.3100	1.3600	1.3500	1.3900	1.4000
Standard heat output Φ_L	[watts/el.]	72	101	131	160	193
Price per element	[EUR/el.]	84.00	96.65	114.72	127.41	143.26

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	431	504.00	606	579.90	786	688.32	960	764.46	1158	859.56
500	8	575	672.00	808	773.20	1048	917.76	1280	1019.28	1544	1146.08
630	10	719	840.00	1010	966.50	1310	1147.20	1600	1274.10	1930	1432.60
760	12	863	1008.00	1212	1159.80	1572	1376.64	1920	1528.92	2316	1719.12
890	14	1007	1176.00	1414	1353.10	1834	1606.08	2240	1783.74	2702	2005.64
1020	16	1150	1344.00	1616	1546.40	2096	1835.52	2560	2038.56	3088	2292.16
1150	18	1294	1512.00	1818	1739.70	2358	2064.96	2880	2293.38	3474	2578.68
1280	20	1438	1680.00	2020	1933.00	2620	2294.40	3200	2548.20	3860	2865.20
1410	22	1582	1848.00	2222	2126.30	2882	2523.84	3520	2803.02	4246	3151.72
1540	24	1726	2016.00	2424	2319.60	3144	2753.28	3840	3057.84	4632	3438.24
1670	26	1869	2184.00	2626	2512.90	3406	2982.72	4160	3312.66	5018	3724.76
1800	28	2013	2352.00	2828	2706.20	3668	3212.16	4480	3567.48	5404	4011.28
1930	30	2157	2520.00	3030	2899.50	3930	3441.60	4800	3822.30	5790	4297.80
2060	32	2301	2688.00	3232	3092.80	4192	3671.04	5120	4077.12	6176	4584.32
2190	34	2445	2856.00	3434	3286.10	4454	3900.48	5440	4331.94	6562 ⋈	4870.84
2320	36	2588	3024.00	3636	3479.40	4716	4129.92	5760	4586.76	6948 ⋈	5157.36
2450	38	2732	3192.00	3838	3672.70	4978	4359.36	6080	4841.58	7334 ⋈	5443.88
2580	40	2876	3360.00	4040	3866.00	5240	4588.80	6400 ⋈	5096.40	7720 ⋈	5730.40
2710	42	3020	3528.00	4242	4059.30	5502	4818.24	6720 ⋈	5351.22	8106 ⋈	6016.92
2840	44	3164	3696.00	4444	4252.60	5764	5047.68	7040 ⋈	5606.04	8492 ⋈	6303.44
2970	46	3307	3864.00	4646	4445.90	6026	5277.12	7360 ⋈	5860.86	8878 ⋈	6589.96
3100	48	3451	4032.00	4848	4639.20	6288	5506.56	7680 ⋈	6115.68	9264 ⋈	6876.48
3230	50	3595	4200.00	5050	4832.50	6550	5736.00	8000 ⋈	6370.50	9650 ⋈	7163.00
3360	52	3739	4368.00	5252	5025.80	6812	5965.44	8320 ⋈	6625.32	10036 ⋈	7449.52
3490	54	3883	4536.00	5454	5219.10	7074	6194.88	8640 ⋈	6880.14	10422 ⋈	7736.04
3620	56	4026	4704.00	5656	5412.40	7336	6424.32	8960 ⋈	7134.96	10808 ⋈	8022.56
3750	58	4170	4872.00	5858	5605.70	7598	6653.76	9280 ⋈	7389.78	11194 ⋈	8309.08
3880	60	4314	5040.00	6060	5799.00	7860	6883.20	9600 ⋈	7644.60	11580 ⋈	8595.60
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 1000 MM

with heat outputs depending on length and depth

Model		M2100	M3100	M4100	M5100	M6100
Height H	[mm]	1000	1000	1000	1000	1000
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.32	1.98	2.63	3.35	4.03
Exponent n	[ ]	1.3200	1.3600	1.3500	1.3800	1.4000
Standard heat output Φ_L	[watts/el.]	79	111	144	176	212
Price per element	[EUR/el.]	85.41	99.72	119.02	131.91	149.01

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	476	512.46	666	598.32	864	714.12	1056	791.46	1272	894.06
500	8	634	683.28	888	797.76	1152	952.16	1408	1055.28	1696	1192.08
630	10	793	854.10	1110	997.20	1440	1190.20	1760	1319.10	2120	1490.10
760	12	952	1024.92	1332	1196.64	1728	1428.24	2112	1582.92	2544	1788.12
890	14	1110	1195.74	1554	1396.08	2016	1666.28	2464	1846.74	2968	2086.14
1020	16	1269	1366.56	1776	1595.52	2304	1904.32	2816	2110.56	3392	2384.16
1150	18	1427	1537.38	1998	1794.96	2592	2142.36	3168	2374.38	3816	2682.18
1280	20	1586	1708.20	2220	1994.40	2880	2380.40	3520	2638.20	4240	2980.20
1410	22	1745	1879.02	2442	2193.84	3168	2618.44	3872	2902.02	4664	3278.22
1540	24	1903	2049.84	2664	2393.28	3456	2856.48	4224	3165.84	5088	3576.24
1670	26	2062	2220.66	2886	2592.72	3744	3094.52	4576	3429.66	5512	3874.26
1800	28	2220	2391.48	3108	2792.16	4032	3332.56	4928	3693.48	5936	4172.28
1930	30	2379	2562.30	3330	2991.60	4320	3570.60	5280	3957.30	6360 ⋈	4470.30
2060	32	2538	2733.12	3552	3191.04	4608	3808.64	5632	4221.12	6784 ⋈	4768.32
2190	34	2696	2903.94	3774	3390.48	4896	4046.68	5984	4484.94	7208 ⋈	5066.34
2320	36	2855	3074.76	3996	3589.92	5184	4284.72	6336 ⋈	4748.76	7632 ⋈	5364.36
2450	38	3013	3245.58	4218	3789.36	5472	4522.76	6688 ⋈	5012.58	8056 ⋈	5662.38
2580	40	3172	3416.40	4440	3988.80	5760	4760.80	7040 ⋈	5276.40	8480 ⋈	5960.40
2710	42	3331	3587.22	4662	4188.24	6048	4998.84	7392 ⋈	5540.22	8904 ⋈	6258.42
2840	44	3489	3758.04	4884	4387.68	6336 ⋈	5236.88	7744 ⋈	5804.04	9328 ⋈	6556.44
2970	46	3648	3928.86	5106	4587.12	6624 ⋈	5474.92	8096 ⋈	6067.86	9752 ⋈	6854.46
3100	48	3806	4099.68	5328	4786.56	6912 ⋈	5712.96	8448 ⋈	6331.68	10176 ⋈	7152.48
3230	50	3965	4270.50	5550	4986.00	7200 ⋈	5951.00	8800 ⋈	6595.50	10600 ⋈	7450.50
3360	52	4124	4441.32	5772	5185.44	7488 ⋈	6189.04	9152 ⋈	6859.32	11024 ⋈	7748.52
3490	54	4282	4612.14	5994	5384.88	7776 ⋈	6427.08	9504 ⋈	7123.14	11448 ⋈	8046.54
3620	56	4441	4782.96	6216	5584.32	8064 ⋈	6665.12	9856 ⋈	7386.96	11872 ⋈	8344.56
3750	58	4599	4953.78	6438	5783.76	8352 ⋈	6903.16	10208 ⋈	7650.78	12296 ⋈	8642.58
3880	60	4758	5124.60	6660	5983.20	8640 ⋈	7141.20	10560 ⋈	7914.60	12720 ⋈	8940.60
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

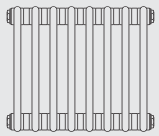
Connection surcharge (per radiator) **with built-in valve**

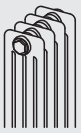
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 1100 MM

with heat outputs depending on length and depth



Model		M2110	M3110	M4110	M5110	M6110
Height H	[mm]	1100	1100	1100	1100	1100
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.44	2.16	2.88	3.65	4.40
Exponent n	[ ]	1.3200	1.3500	1.3500	1.3800	1.4000
Standard heat output Φ_L	[watts/el.]	87	122	157	192	232
Price per element	[EUR/el.]	88.46	105.35	125.16	142.23	162.67

Length L	Length	Φ_S ΔT		Φ_S ΔT		Φ_S ΔT		Φ_S ΔT		Φ_S ΔT	
		50 K	Price	50 K	Price	50 K	Price	50 K	Price	50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	520	530.76	732	632.10	942	750.96	1152	853.38	1392	976.02
500	8	693	707.68	976	842.80	1256	1001.28	1536	1137.84	1856	1301.36
630	10	866	884.60	1220	1053.50	1570	1251.60	1920	1422.30	2320	1626.70
760	12	1039	1061.52	1464	1264.20	1884	1501.92	2304	1706.76	2784	1952.04
890	14	1212	1238.44	1708	1474.90	2198	1752.24	2688	1991.22	3248	2277.38
1020	16	1386	1415.36	1952	1685.60	2512	2002.56	3072	2275.68	3712	2602.72
1150	18	1559	1592.28	2196	1896.30	2826	2252.88	3456	2560.14	4176	2928.06
1280	20	1732	1769.20	2440	2107.00	3140	2503.20	3840	2844.60	4640	3253.40
1410	22	1905	1946.12	2684	2317.70	3454	2753.52	4224	3129.06	5104	3578.74
1540	24	2078	2123.04	2928	2528.40	3768	3003.84	4608	3413.52	5568	3904.08
1670	26	2252	2299.96	3172	2739.10	4082	3254.16	4992	3697.98	6032	4229.42
1800	28	2425	2476.88	3416	2949.80	4396	3504.48	5376	3982.44	6496 ⋈	4554.76
1930	30	2598	2653.80	3660	3160.50	4710	3754.80	5760	4266.90	6960 ⋈	4880.10
2060	32	2771	2830.72	3904	3371.20	5024	4005.12	6144	4551.36	7424 ⋈	5205.44
2190	34	2944	3007.64	4148	3581.90	5338	4255.44	6528 ⋈	4835.82	7888 ⋈	5530.78
2320	36	3118	3184.56	4392	3792.60	5652	4505.76	6912 ⋈	5120.28	8352 ⋈	5856.12
2450	38	3291	3361.48	4636	4003.30	5966	4756.08	7296 ⋈	5404.74	8816 ⋈	6181.46
2580	40	3464	3538.40	4880	4214.00	6280 ⋈	5006.40	7680 ⋈	5689.20	9280 ⋈	6506.80
2710	42	3637	3715.32	5124	4424.70	6594 ⋈	5256.72	8064 ⋈	5973.66	9744 ⋈	6832.14
2840	44	3810	3892.24	5368	4635.40	6908 ⋈	5507.04	8448 ⋈	6258.12	10208 ⋈	7157.48
2970	46	3984	4069.16	5612	4846.10	7222 ⋈	5757.36				
3100	48	4157	4246.08	5856	5056.80	7536 ⋈	6007.68				
3230	50	4330	4423.00	6100	5267.50	7850 ⋈	6258.00				
3360	52	4503	4599.92	6344	5478.20	8164 ⋈	6508.32				
3490	54	4676	4776.84	6588	5688.90	8478 ⋈	6758.64				
3620	56	4850	4953.76	6832	5899.60	8792 ⋈	7008.96				
3750	58	5023	5130.68	7076	6110.30	9106 ⋈	7259.28				
3880	60	5196	5307.60	7320	6321.00	9420 ⋈	7509.60				
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

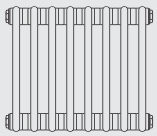
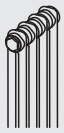
Connection surcharge (per radiator) **with built-in valve**

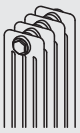
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

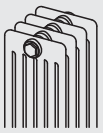
For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 1200 MM

with heat outputs depending on length and depth





Model		M2120	M3120	M4120	M5120	M6120
Height H	[mm]	1200	1200	1200	1200	1200
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.56	2.34	3.12	3.96	4.76
Exponent n	[ ]	1.3200	1.3500	1.3500	1.3800	1.4000
Standard heat output Φ_L	[watts/el.]	94	132	170	209	251
Price per element	[EUR/el.]	91.59	113.46	133.30	154.02	174.42

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	565	549.54	792	680.76	1020	799.80	1254	924.12	1506	1046.52
500	8	753	732.72	1056	907.68	1360	1066.40	1672	1232.16	2008	1395.36
630	10	941	915.90	1320	1134.60	1700	1333.00	2090	1540.20	2510	1744.20
760	12	1129	1099.08	1584	1361.52	2040	1599.60	2508	1848.24	3012	2093.04
890	14	1317	1282.26	1848	1588.44	2380	1866.20	2926	2156.28	3514	2441.88
1020	16	1506	1465.44	2112	1815.36	2720	2132.80	3344	2464.32	4016	2790.72
1150	18	1694	1648.62	2376	2042.28	3060	2399.40	3762	2772.36	4518	3139.56
1280	20	1882	1831.80	2640	2269.20	3400	2666.00	4180	3080.40	5020	3488.40
1410	22	2070	2014.98	2904	2496.12	3740	2932.60	4598	3388.44	5522	3837.24
1540	24	2258	2198.16	3168	2723.04	4080	3199.20	5016	3696.48	6024	4186.08
1670	26	2447	2381.34	3432	2949.96	4420	3465.80	5434	4004.52	6526 ⋈	4534.92
1800	28	2635	2564.52	3696	3176.88	4760	3732.40	5852	4312.56	7028 ⋈	4883.76
1930	30	2823	2747.70	3960	3403.80	5100	3999.00	6270 ⋈	4620.60	7530 ⋈	5232.60
2060	32	3011	2930.88	4224	3630.72	5440	4265.60	6688 ⋈	4928.64	8032 ⋈	5581.44
2190	34	3199	3114.06	4488	3857.64	5780	4532.20	7106 ⋈	5236.68	8534 ⋈	5930.28
2320	36	3388	3297.24	4752	4084.56	6120	4798.80	7524 ⋈	5544.72	9036 ⋈	6279.12
2450	38	3576	3480.42	5016	4311.48	6460 ⋈	5065.40	7942 ⋈	5852.76	9538 ⋈	6627.96
2580	40	3764	3663.60	5280	4538.40	6800 ⋈	5332.00	8360 ⋈	6160.80	10040 ⋈	6976.80
2710	42	3952	3846.78	5544	4765.32	7140 ⋈	5598.60	8778 ⋈	6468.84	10542 ⋈	7325.64
2840	44	4140	4029.96	5808	4992.24	7480 ⋈	5865.20	9196 ⋈	6776.88	11044 ⋈	7674.48
2970	46	4329	4213.14	6072	5219.16	7820 ⋈	6131.80				
3100	48	4517	4396.32	6336	5446.08	8160 ⋈	6398.40				
3230	50	4705	4579.50	6600	5673.00	8500 ⋈	6665.00				
3360	52	4893	4762.68	6864	5899.92	8840 ⋈	6931.60				
3490	54	5081	4945.86	7128	6126.84	9180 ⋈	7198.20				
3620	56	5270	5129.04	7392	6353.76	9520 ⋈	7464.80				
3750	58	5458	5312.22	7656	6580.68	9860 ⋈	7731.40				
3880	60	5646	5495.40	7920	6807.60	10200 ⋈	7998.00				
Maximum number of elements per block		46		46		46		46		46	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

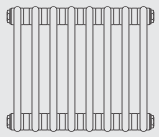
Connection surcharge (per radiator) **with built-in valve**

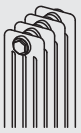
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 1500 MM

with heat outputs depending on length and depth



Model		M2150	M3150	M4150	M5150	M6150
Height H	[mm]	1500	1500	1500	1500	1500
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.93	2.89	3.85	4.87	5.85
Exponent n	[ ]	1.3200	1.3500	1.3500	1.3700	1.4000
Standard heat output Φ_L	[watts/el.]	117	163	208	257	307
Price per element	[EUR/el.]	102.47	130.04	157.69	184.55	212.56

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	702	614.82	978	780.24	1248	946.14	1542	1107.30	1842	1275.36
500	8	936	819.76	1304	1040.32	1664	1261.52	2056	1476.40	2456	1700.48
630	10	1170	1024.70	1630	1300.40	2080	1576.90	2570	1845.50	3070	2125.60
760	12	1404	1229.64	1956	1560.48	2496	1892.28	3084	2214.60	3684	2550.72
890	14	1638	1434.58	2282	1820.56	2912	2207.66	3598	2583.70	4298	2975.84
1020	16	1872	1639.52	2608	2080.64	3328	2523.04	4112	2952.80	4912	3400.96
1150	18	2106	1844.46	2934	2340.72	3744	2838.42	4626	3321.90	5526	3826.08
1280	20	2340	2049.40	3260	2600.80	4160	3153.80	5140	3691.00	6140	4251.20
1410	22	2574	2254.34	3586	2860.88	4576	3469.18	5654	4060.10	6754 ⋈	4676.32
1540	24	2808	2459.28	3912	3120.96	4992	3784.56	6168	4429.20	7368 ⋈	5101.44
1670	26	3042	2664.22	4238	3381.04	5408	4099.94	6682 ⋈	4798.30	7982 ⋈	5526.56
1800	28	3276	2869.16	4564	3641.12	5824	4415.32	7196 ⋈	5167.40	8596 ⋈	5951.68
1930	30	3510	3074.10	4890	3901.20	6240 ⋈	4730.70	7710 ⋈	5536.50	9210 ⋈	6376.80
2060	32	3744	3279.04	5216	4161.28	6656 ⋈	5046.08				
2190	34	3978	3483.98	5542	4421.36	7072 ⋈	5361.46				
2320	36	4212	3688.92	5868	4681.44	7488 ⋈	5676.84				
2450	38	4446	3893.86	6194 ⋈	4941.52	7904 ⋈	5992.22				
2580	40	4680	4098.80	6520 ⋈	5201.60	8320 ⋈	6307.60				
2710	42	4914	4303.74	6846 ⋈	5461.68	8736 ⋈	6622.98				
2840	44	5148	4508.68	7172 ⋈	5721.76	9152 ⋈	6938.36				
2970	46	5382	4713.62	7498 ⋈	5981.84	9568 ⋈	7253.74				
3100	48	5616	4918.56	7824 ⋈	6241.92	9984 ⋈	7569.12				
3230	50	5850	5123.50	8150 ⋈	6502.00	10400 ⋈	7884.50				
3360	52	6084	5328.44	8476 ⋈	6762.08	10816 ⋈	8199.88				
3490	54	6318	5533.38	8802 ⋈	7022.16	11232 ⋈	8515.26				
3620	56	6552	5738.32	9128 ⋈	7282.24	11648 ⋈	8830.64				
3750	58	6786	5943.26	9454 ⋈	7542.32	12064 ⋈	9146.02				
3880	60	7020	6148.20	9780 ⋈	7802.40	12480 ⋈	9461.40				
Maximum number of elements per block		46		46		46		46		42	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

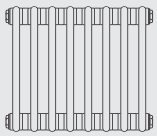
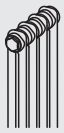
Connection surcharge (per radiator) **with built-in valve**

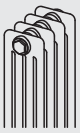
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

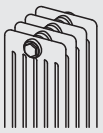
For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 1800 MM

with heat outputs depending on length and depth





Model		M2180	M3180	M4180	M5180	M6180
Height H	[mm]	1800	1800	1800	1800	1800
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	2.29	3.43	4.58	5.78	6.95
Exponent n	[ ]	1.3200	1.3500	1.3400	1.3700	1.3900
Standard heat output Φ_L	[watts/el.]	141	193	246	305	361
Price per element	[EUR/el.]	111.76	147.08	176.79	206.73	238.94

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	846	670.56	1158	882.48	1476	1060.74	1830	1240.38	2166	1433.64
500	8	1128	894.08	1544	1176.64	1968	1414.32	2440	1653.84	2888	1911.52
630	10	1410	1117.60	1930	1470.80	2460	1767.90	3050	2067.30	3610	2389.40
760	12	1692	1341.12	2316	1764.96	2952	2121.48	3660	2480.76	4332	2867.28
890	14	1974	1564.64	2702	2059.12	3444	2475.06	4270	2894.22	5054	3345.16
1020	16	2256	1788.16	3088	2353.28	3936	2828.64	4880	3307.68	5776	3823.04
1150	18	2538	2011.68	3474	2647.44	4428	3182.22	5490	3721.14	6498 ⋈	4300.92
1280	20	2820	2235.20	3860	2941.60	4920	3535.80	6100	4134.60	7220 ⋈	4778.80
1410	22	3102	2458.72	4246	3235.76	5412	3889.38	6710 ⋈	4548.06	7942 ⋈	5256.68
1540	24	3384	2682.24	4632	3529.92	5904	4242.96	7320 ⋈	4961.52	8664 ⋈	5734.56
1670	26	3666	2905.76	5018	3824.08	6396 ⋈	4596.54	7930 ⋈	5374.98	9386 ⋈	6212.44
1800	28	3948	3129.28	5404	4118.24	6888 ⋈	4950.12	8540 ⋈	5788.44	10108 ⋈	6690.32
1930	30	4230	3352.80	5790	4412.40	7380 ⋈	5303.70	9150 ⋈	6201.90	10830 ⋈	7168.20
2060	32	4512	3576.32	6176	4706.56	7872 ⋈	5657.28				
2190	34	4794	3799.84	6562 ⋈	5000.72	8364 ⋈	6010.86				
2320	36	5076	4023.36	6948 ⋈	5294.88	8856 ⋈	6364.44				
2450	38	5358	4246.88	7334 ⋈	5589.04	9348 ⋈	6718.02				
2580	40	5640	4470.40	7720 ⋈	5883.20	9840 ⋈	7071.60				
2710	42	5922 ⋈	4693.92	8106 ⋈	6177.36	10332 ⋈	7425.18				
2840	44	6204 ⋈	4917.44	8492 ⋈	6471.52	10824 ⋈	7778.76				
2970	46	6486 ⋈	5140.96	8878 ⋈	6765.68	11316 ⋈	8132.34				
3100	48	6768 ⋈	5364.48	9264 ⋈	7059.84	11808 ⋈	8485.92				
3230	50	7050 ⋈	5588.00	9650 ⋈	7354.00	12300 ⋈	8839.50				
3360	52	7332 ⋈	5811.52	10036 ⋈	7648.16	12792 ⋈	9193.08				
3490	54	7614 ⋈	6035.04	10422 ⋈	7942.32	13284 ⋈	9546.66				
3620	56	7896 ⋈	6258.56	10808 ⋈	8236.48	13776 ⋈	9900.24				
3750	58	8178 ⋈	6482.08	11194 ⋈	8530.64	14268 ⋈	10253.82				
3880	60	8460 ⋈	6705.60	11580 ⋈	8824.80	14760 ⋈	10607.40				
Maximum number of elements per block		46		46		46		38		32	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

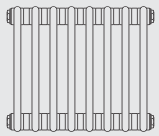
Connection surcharge (per radiator) **with built-in valve**

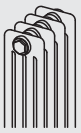
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 2000 MM

with heat outputs depending on length and depth



Model		M2200	M3200	M4200	M5200	M6200
Height H	[mm]	2000	2000	2000	2000	2000
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	2.53	3.80	5.06	6.38	7.67
Exponent n	[ ]	1.3200	1.3400	1.3400	1.3700	1.3900
Standard heat output Φ_L	[watts/el.]	157	214	270	337	397
Price per element	[EUR/el.]	119.59	154.38	190.22	223.01	257.72

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	942	717.54	1284	926.28	1620	1141.32	2022	1338.06	2382	1546.32
500	8	1256	956.72	1712	1235.04	2160	1521.76	2696	1784.08	3176	2061.76
630	10	1570	1195.90	2140	1543.80	2700	1902.20	3370	2230.10	3970	2577.20
760	12	1884	1435.08	2568	1852.56	3240	2282.64	4044	2676.12	4764	3092.64
890	14	2198	1674.26	2996	2161.32	3780	2663.08	4718	3122.14	5558	3608.08
1020	16	2512	1913.44	3424	2470.08	4320	3043.52	5392	3568.16	6352 ⋈	4123.52
1150	18	2826	2152.62	3852	2778.84	4860	3423.96	6066	4014.18	7146 ⋈	4638.96
1280	20	3140	2391.80	4280	3087.60	5400	3804.40	6740 ⋈	4460.20	7940 ⋈	5154.40
1410	22	3454	2630.98	4708	3396.36	5940	4184.84	7414 ⋈	4906.22	8734 ⋈	5669.84
1540	24	3768	2870.16	5136	3705.12	6480 ⋈	4565.28	8088 ⋈	5352.24	9528 ⋈	6185.28
1670	26	4082	3109.34	5564	4013.88	7020 ⋈	4945.72	8762 ⋈	5798.26	10322 ⋈	6700.72
1800	28	4396	3348.52	5992	4322.64	7560 ⋈	5326.16	9436 ⋈	6244.28	11116 ⋈	7216.16
1930	30	4710	3587.70	6420 ⋈	4631.40	8100 ⋈	5706.60	10110 ⋈	6690.30	11910 ⋈	7731.60
2060	32	5024	3826.88	6848 ⋈	4940.16	8640 ⋈	6087.04				
2190	34	5338	4066.06	7276 ⋈	5248.92	9180 ⋈	6467.48				
2320	36	5652	4305.24	7704 ⋈	5557.68	9720 ⋈	6847.92				
2450	38	5966	4544.42	8132 ⋈	5866.44	10260 ⋈	7228.36				
2580	40	6280 ⋈	4783.60	8560 ⋈	6175.20	10800 ⋈	7608.80				
2710	42	6594 ⋈	5022.78	8988 ⋈	6483.96	11340 ⋈	7989.24				
2840	44	6908 ⋈	5261.96	9416 ⋈	6792.72	11880 ⋈	8369.68				
2970	46	7222 ⋈	5501.14	9844 ⋈	7101.48	12420 ⋈	8750.12				
3100	48	7536 ⋈	5740.32	10272 ⋈	7410.24	12960 ⋈	9130.56				
3230	50	7850 ⋈	5979.50	10700 ⋈	7719.00	13500 ⋈	9511.00				
3360	52	8164 ⋈	6218.68	11128 ⋈	8027.76	14040 ⋈	9891.44				
3490	54	8478 ⋈	6457.86	11556 ⋈	8336.52	14580 ⋈	10271.88				
3620	56	8792 ⋈	6697.04	11984 ⋈	8645.28	15120 ⋈	10652.32				
3750	58	9106 ⋈	6936.22	12412 ⋈	8954.04	15660 ⋈	11032.76				
3880	60	9420 ⋈	7175.40	12840 ⋈	9262.80	16200 ⋈	11413.20				
Maximum number of elements per block		46		46		46		38		32	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

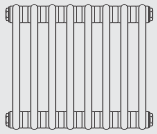
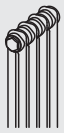
Connection surcharge (per radiator) **with built-in valve**

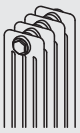
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

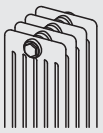
For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 2200 MM

with heat outputs depending on length and depth





Model		M2220	M3220	M4220	M5220	M6220
Height H	[mm]	2200	2200	2200	2200	2200
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	2.78	4.16	5.55	6.99	8.40
Exponent n	[ ]	1.3200	1.3400	1.3400	1.3600	1.3900
Standard heat output Φ_L	[watts/el.]	175	235	295	369	432
Price per element	[EUR/el.]	127.79	167.70	206.02	242.14	281.17

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	1050	766.74	1410	1006.20	1770	1236.12	2214	1452.84	2592	1687.02
500	8	1400	1022.32	1880	1341.60	2360	1648.16	2952	1937.12	3456	2249.36
630	10	1750	1277.90	2350	1677.00	2950	2060.20	3690	2421.40	4320	2811.70
760	12	2100	1533.48	2820	2012.40	3540	2472.24	4428	2905.68	5184	3374.04
890	14	2450	1789.06	3290	2347.80	4130	2884.28	5166	3389.96	6048	3936.38
1020	16	2800	2044.64	3760	2683.20	4720	3296.32	5904	3874.24	6912 ⋈	4498.72
1150	18	3150	2300.22	4230	3018.60	5310	3708.36	6642 ⋈	4358.52	7776 ⋈	5061.06
1280	20	3500	2555.80	4700	3354.00	5900	4120.40	7380 ⋈	4842.80	8640 ⋈	5623.40
1410	22	3850	2811.38	5170	3689.40	6490 ⋈	4532.44	8118 ⋈	5327.08	9504 ⋈	6185.74
1540	24	4200	3066.96	5640	4024.80	7080 ⋈	4944.48	8856 ⋈	5811.36	10368 ⋈	6748.08
1670	26	4550	3322.54	6110	4360.20	7670 ⋈	5356.52	9594 ⋈	6295.64	11232 ⋈	7310.42
1800	28	4900	3578.12	6580 ⋈	4695.60	8260 ⋈	5768.56	10332 ⋈	6779.92	12096 ⋈	7872.76
1930	30	5250	3833.70	7050 ⋈	5031.00	8850 ⋈	6180.60	11070 ⋈	7264.20	12960 ⋈	8435.10
2060	32	5600 ⋈	4089.28	7520 ⋈	5366.40	9440 ⋈	6592.64				
2190	34	5950 ⋈	4344.86	7990 ⋈	5701.80	10030 ⋈	7004.68				
2320	36	6300 ⋈	4600.44	8460 ⋈	6037.20	10620 ⋈	7416.72				
2450	38	6650 ⋈	4856.02	8930 ⋈	6372.60	11210 ⋈	7828.76				
2580	40	7000 ⋈	5111.60	9400 ⋈	6708.00	11800 ⋈	8240.80				
2710	42	7350 ⋈	5367.18	9870 ⋈	7043.40	12390 ⋈	8652.84				
2840	44	7700 ⋈	5622.76	10340 ⋈	7378.80	12980 ⋈	9064.88				
2970	46	8050 ⋈	5878.34	10810 ⋈	7714.20	13570 ⋈	9476.92				
3100	48	8400 ⋈	6133.92	11280 ⋈	8049.60	14160 ⋈	9888.96				
3230	50	8750 ⋈	6389.50	11750 ⋈	8385.00	14750 ⋈	10301.00				
3360	52	9100 ⋈	6645.08	12220 ⋈	8720.40	15340 ⋈	10713.04				
3490	54	9450 ⋈	6900.66	12690 ⋈	9055.80	15930 ⋈	11125.08				
3620	56	9800 ⋈	7156.24	13160 ⋈	9391.20	16520 ⋈	11537.12				
3750	58	10150 ⋈	7411.82	13630 ⋈	9726.60	17110 ⋈	11949.16				
3880	60	10500 ⋈	7667.40	14100 ⋈	10062.00	17700 ⋈	12361.20				
Maximum number of elements per block		30		30		30		30		26	
Maximum number of elements for second block / third block		15 / 15		15 / 15		15 / 15		15 / 15		15 / 15	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

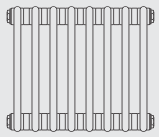
Connection surcharge (per radiator) **with built-in valve**

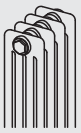
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 2500 MM

with heat outputs depending on length and depth



Model		M2250	M3250	M4250	M5250	M6250
Height H	[mm]	2500	2500	2500	2500	2500
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	3.14	4.71	6.27	7.90	9.49
Exponent n	[ ]	1.3200	1.3400	1.3400	1.3600	1.3900
Standard heat output Φ_L	[watts/el.]	201	266	331	417	483
Price per element	[EUR/el.]	136.04	181.00	221.91	261.34	304.47

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	1206	816.24	1596	1086.00	1986	1331.46	2502	1568.04	2898	1826.82
500	8	1608	1088.32	2128	1448.00	2648	1775.28	3336	2090.72	3864	2435.76
630	10	2010	1360.40	2660	1810.00	3310	2219.10	4170	2613.40	4830	3044.70
760	12	2412	1632.48	3192	2172.00	3972	2662.92	5004	3136.08	5796	3653.64
890	14	2814	1904.56	3724	2534.00	4634	3106.74	5838	3658.76	6762 ⋈	4262.58
1020	16	3216	2176.64	4256	2896.00	5296	3550.56	6672 ⋈	4181.44	7728 ⋈	4871.52
1150	18	3618	2448.72	4788	3258.00	5958	3994.38	7506 ⋈	4704.12	8694 ⋈	5480.46
1280	20	4020	2720.80	5320	3620.00	6620 ⋈	4438.20	8340 ⋈	5226.80	9660 ⋈	6089.40
1410	22	4422	2992.88	5852	3982.00	7282 ⋈	4882.02	9174 ⋈	5749.48	10626 ⋈	6698.34
1540	24	4824	3264.96	6384 ⋈	4344.00	7944 ⋈	5325.84	10008 ⋈	6272.16	11592 ⋈	7307.28
1670	26	5226	3537.04	6916 ⋈	4706.00	8606 ⋈	5769.66	10842 ⋈	6794.84	12558 ⋈	7916.22
1800	28	5628	3809.12	7448 ⋈	5068.00	9268 ⋈	6213.48	11676 ⋈	7317.52	13524 ⋈	8525.16
1930	30	6030	4081.20	7980 ⋈	5430.00	9930 ⋈	6657.30	12510 ⋈	7840.20	14490 ⋈	9134.10
2060	32	6432 ⋈	4353.28								
2190	34	6834 ⋈	4625.36								
2320	36	7236 ⋈	4897.44								
2450	38	7638 ⋈	5169.52								
2580	40	8040 ⋈	5441.60								
2710	42	8442 ⋈	5713.68								
2840	44	8844 ⋈	5985.76								
2970	46	9246 ⋈	6257.84								
3100	48	9648 ⋈	6529.92								
3230	50	10050 ⋈	6802.00								
3360	52	10452 ⋈	7074.08								
3490	54	10854 ⋈	7346.16								
3620	56	11256 ⋈	7618.24								
3750	58	11658 ⋈	7890.32								
3880	60	12060 ⋈	8162.40								

Maximum number of elements per block		30	30	30	30	26
Maximum number of elements for second block / third block		15 / 15	15 / 15	15 / 15	15 / 15	15 / 15

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

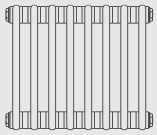
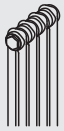
Connection surcharge (per radiator) **with built-in valve**

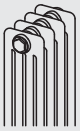
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

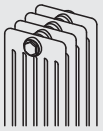
For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 2800 MM

with heat outputs depending on length and depth





Model		M2280	M3280	M4280	M5280	M6280
Height H	[mm]	2800	2800	2800	2800	2800
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	3.50	5.25	7.00	8.81	10.59
Exponent n	[ ]	1.3300	1.3400	1.3400	1.3500	1.3800
Standard heat output Φ_L	[watts/el.]	230	297	366	466	533
Price per element	[EUR/el.]	146.70	195.17	242.69	283.06	332.71

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	1380	880.20	1782	1171.02	2196	1456.14	2796	1698.36	3198	1996.26
500	8	1840	1173.60	2376	1561.36	2928	1941.52	3728	2264.48	4264	2661.68
630	10	2300	1467.00	2970	1951.70	3660	2426.90	4660	2830.60	5330	3327.10
760	12	2760	1760.40	3564	2342.04	4392	2912.28	5592	3396.72	6396 ⋈	3992.52
890	14	3220	2053.80	4158	2732.38	5124	3397.66	6524 ⋈	3962.84	7462 ⋈	4657.94
1020	16	3680	2347.20	4752	3122.72	5856	3883.04	7456 ⋈	4528.96	8528 ⋈	5323.36
1150	18	4140	2640.60	5346	3513.06	6588 ⋈	4368.42	8388 ⋈	5095.08	9594 ⋈	5988.78
1280	20	4600	2934.00	5940	3903.40	7320 ⋈	4853.80	9320 ⋈	5661.20	10660 ⋈	6654.20
1410	22	5060	3227.40	6534 ⋈	4293.74	8052 ⋈	5339.18	10252 ⋈	6227.32	11726 ⋈	7319.62
1540	24	5520	3520.80	7128 ⋈	4684.08	8784 ⋈	5824.56	11184 ⋈	6793.44	12792 ⋈	7985.04
1670	26	5980	3814.20	7722 ⋈	5074.42	9516 ⋈	6309.94	12116 ⋈	7359.56	13858 ⋈	8650.46
1800	28	6440 ⋈	4107.60	8316 ⋈	5464.76	10248 ⋈	6795.32	13048 ⋈	7925.68	14924 ⋈	9315.88
1930	30	6900 ⋈	4401.00	8910 ⋈	5855.10	10980 ⋈	7280.70	13980 ⋈	8491.80	15990 ⋈	9981.30
2060	32	7360 ⋈	4694.40								
2190	34	7820 ⋈	4987.80								
2320	36	8280 ⋈	5281.20								
2450	38	8740 ⋈	5574.60								
2580	40	9200 ⋈	5868.00								
2710	42	9660 ⋈	6161.40								
2840	44	10120 ⋈	6454.80								
2970	46	10580 ⋈	6748.20								
3100	48	11040 ⋈	7041.60								
3230	50	11500 ⋈	7335.00								
3360	52	11960 ⋈	7628.40								
3490	54	12420 ⋈	7921.80								
3620	56	12880 ⋈	8215.20								
3750	58	13340 ⋈	8508.60								
3880	60	13800 ⋈	8802.00								

Maximum number of elements per block	30	30	30	26	21
Maximum number of elements for second block / third block	15 / 15	15 / 15	15 / 15	15 / 15	15 / 15

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, and 98	156.83 €

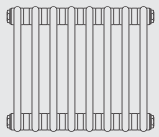
Connection surcharge (per radiator) **with built-in valve**

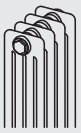
Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

PRICES AND OUTPUTS – HEIGHT OF 3000 MM

with heat outputs depending on length and depth



Model		M2300	M3300	M4300	M5300	M6300
Height H	[mm]	3000	3000	3000	3000	3000
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	3.75	5.62	7.49	9.42	11.31
Exponent n	[ ]	1.3300	1.3300	1.3400	1.3500	1.3800
Standard heat output Φ_L	[watts/el.]	250	318	390	498	566
Price per element	[EUR/el.]	153.07	206.28	255.31	298.16	349.49

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
370	6	1500	918.42	1908	1237.68	2340	1531.86	2988	1788.96	3396	2096.94
500	8	2000	1224.56	2544	1650.24	3120	2042.48	3984	2385.28	4528	2795.92
630	10	2500	1530.70	3180	2062.80	3900	2553.10	4980	2981.60	5660	3494.90
760	12	3000	1836.84	3816	2475.36	4680	3063.72	5976	3577.92	6792 ⋈	4193.88
890	14	3500	2142.98	4452	2887.92	5460	3574.34	6972 ⋈	4174.24	7924 ⋈	4892.86
1020	16	4000	2449.12	5088	3300.48	6240 ⋈	4084.96	7968 ⋈	4770.56	9056 ⋈	5591.84
1150	18	4500	2755.26	5724	3713.04	7020 ⋈	4595.58	8964 ⋈	5366.88	10188 ⋈	6290.82
1280	20	5000	3061.40	6360 ⋈	4125.60	7800 ⋈	5106.20	9960 ⋈	5963.20	11320 ⋈	6989.80
1410	22	5500	3367.54	6996 ⋈	4538.16	8580 ⋈	5616.82	10956 ⋈	6559.52	12452 ⋈	7688.78
1540	24	6000	3673.68	7632 ⋈	4950.72	9360 ⋈	6127.44	11952 ⋈	7155.84	13584 ⋈	8387.76
1670	26	6500 ⋈	3979.82	8268 ⋈	5363.28	10140 ⋈	6638.06	12948 ⋈	7752.16	14716 ⋈	9086.74
1800	28	7000 ⋈	4285.96	8904 ⋈	5775.84	10920 ⋈	7148.68	13944 ⋈	8348.48	15848 ⋈	9785.72
1930	30	7500 ⋈	4592.10	9540 ⋈	6188.40	11700 ⋈	7659.30	14940 ⋈	8944.80	16980 ⋈	10484.70
2060	32	8000 ⋈	4898.24								
2190	34	8500 ⋈	5204.38								
2320	36	9000 ⋈	5510.52								
2450	38	9500 ⋈	5816.66								
2580	40	10000 ⋈	6122.80								
2710	42	10500 ⋈	6428.94								
2840	44	11000 ⋈	6735.08								
2970	46	11500 ⋈	7041.22								
3100	48	12000 ⋈	7347.36								
3230	50	12500 ⋈	7653.50								
3360	52	13000 ⋈	7959.64								
3490	54	13500 ⋈	8265.78								
3620	56	14000 ⋈	8571.92								
3750	58	14500 ⋈	8878.06								
3880	60	15000 ⋈	9184.20								

Maximum number of elements per block		30	30	30	26	21
Maximum number of elements for second block / third block		15 / 15	15 / 15	15 / 15	15 / 15	15 / 15

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Connection surcharge (per radiator) **without built-in valve**

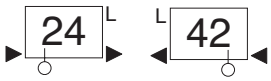
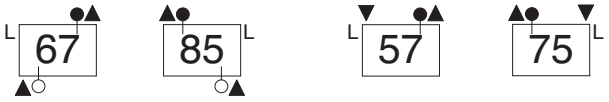
Connection system	Connection arrangement	Surcharge
2	12, 34, 14, and 32	–
	24 and 42	22.30 €
	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Surcharge
31, 41, 32, 42	Valve on side at top	69, 89	243.66 €
		96, 98	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

For an overview of the connection versions please see connection options.

2-PIPE CONNECTIONS WITHOUT BUILT-IN VALVE

Connection system	Order code |5|	ζ value	Position ordering code |6|	Connection size	Order code |7| VL	Order code |7| RL	Surcharge per radiator [EUR]
2-pipe, side	2	2.5		G ⅜" G ½" G ¾" G 1"			–
2-pipe, on side	2	2.5		G ⅜" G ½" G ¾" G 1"			22.30
2-pipe, side	2	2.5		G ⅜" G ½" G ¾" G 1"			53.65
2-pipe, from bottom, from top	2	2.5		G ⅜" G ½" G ¾"	38 12 34 10	38 12 34 10	113.91
2-pipe, from bottom, from top, side by side	2	2.5		G ⅜" G ½"			
2-pipe, from bottom, from top	2	2.5		G ⅜" G ½" G ¾"			156.83
2-pipe, from bottom, from top, centre	2	2.5		G ½"			
Special connections – design according to drawing – order code |5| = 99							On request

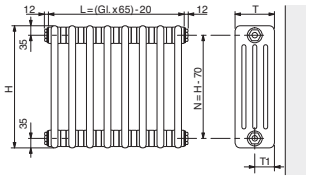
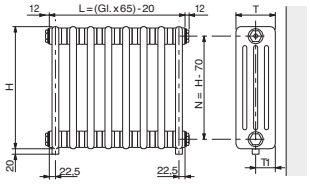
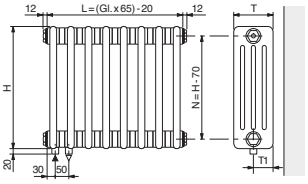
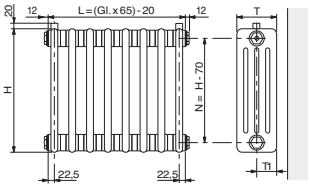
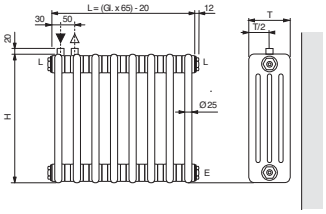
L: recommended position for air vent connection;

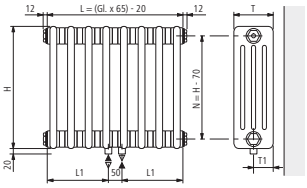
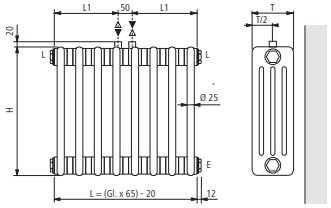
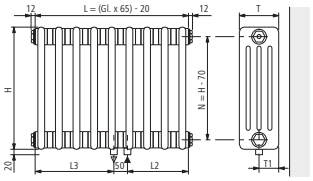
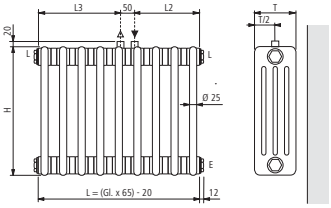
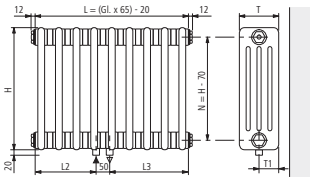
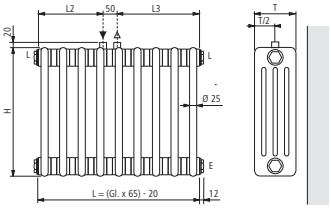
◯ Standard cut-off wheel; ● 100 % tight cut-off wheel

The connection options 69, 89, 50, 70, 98, 96, 07, and 05 are not possible for all lengths (see price and output tables).

Starting from a height of 1800 mm a drain is additionally built in for process engineering reasons.

DIMENSIONAL DRAWINGS FOR SANO RADIATORS

2-pipe, side	2-pipe, from bottom, from top	2-pipe, from bottom, from top, side by side
		
		

2-pipe, from bottom, centre	2-pipe, from top, centre
	
even no. of elements (96 / 98)	even no. of elements (05 / 07)
	
uneven no. of elements (96)	uneven no. of elements (05)
	
uneven no. of elements (98)	uneven no. of elements (07)

L1: ½ x (el. x 65 – 20) – 25
L2: ½ x [(el. – 1) x 65 – 20] – 25
L3: ½ x [(el. + 1) x 65 – 20] – 25

H: height
L: length
N: hub distance

Number of columns	T [mm]	T1 [mm]
2 columns	65	32.5
3 columns	105	52.5
4 columns	145	72.5
5 columns	185	92.5
6 columns	225	112.5

2-PIPE CONNECTIONS WITH BUILT-IN VALVE

General

In this special version of the column radiator, a factory k_V-preset valve is built in.

- Maximum length as Sano radiators without built-in valve (see "Maximum length"):
  - Can be nippled with valve arranged at top (delivery in sub-blocks possible)
  - Cannot be nippled with valve arranged at bottom (delivered in a single piece)
- Surface finish as with column radiators without built-in valve

Range available

- Factory k_V-preset built-in valve, arranged at top or bottom, right or left
- Standard connection:
  - 2-pipe connection bottom or top, on same side (on the side of the valve) or centre with hub distance 50 mm
  - Connection size: G ½" internal thread or G ¾" external thread
  - Flow welded into the 1st element, return into the 2nd element
  - For the version with valve arranged at the bottom, two air vents are provided
- Thermostatic sensor head is not included in the scope of delivery and must be ordered as an accessory
- Not available in high-pressure version

Special versions

- 2-pipe connections (for valve arranged at top or bottom, on request):
  - From top, on alternating sides
- Version as additional block that can be nippled:
  - With valve arranged at top
  - Length 2 elements
- Column radiator angled version:
  - With valve arranged at top
  - The first three elements cannot be angled in each case
- In the case of a connection from the top, the heat output can be reduced

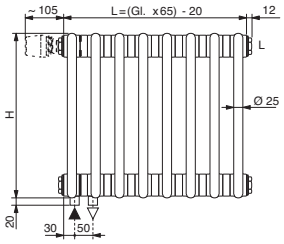
Connection system	Order code |5|		Position ordering code |6|		Conn. size	Order code |7| VL	RL	Surcharge per radiator [EUR]
2-pipe from bottom, built-in valve integrated on side at top	31	Standard valve with M30 x 1.5 connection	69 L	L 89	G ½" / G ¾"	12 / 84	12 / 84	243.66 / 261.97
	41	Valve with fine adjustment and M30 x 1.5 connection						
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
	31	Standard valve with M30 x 1.5 connection	98 L	L 96	G ½" / G ¾"	12 / 84	12 / 84	356.38 / 374.69
	41	Valve with fine adjustment and M30 x 1.5 connection						
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
2-pipe from bottom, built-in valve integrated on side at bottom	61	Standard valve with M30 x 1.5 connection	L 69 L	L 89 L	G ½" / G ¾"	12 / 84	12 / 84	342.43 / 360.74
	81	Valve with fine adjustment and M30 x 1.5 connection						
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
	61	Standard valve with M30 x 1.5 connection	L 98 L	L 96 L	G ½" / G ¾"	12 / 84	12 / 84	455.15 / 473.46
	81	Valve with fine adjustment and M30 x 1.5 connection						
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
2-pipe from top, built-in valve integrated on side at top	31	Standard valve with M30 x 1.5 connection	50 L	L 70	G ½" / G ¾"	12 / 84	12 / 84	243.66 / 261.97
	41	Valve with fine adjustment and M30 x 1.5 connection						
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
2-pipe from top, built-in valve integrated on side at bottom	61	Standard valve with M30 x 1.5 connection	L 50 L	L 70 L	G ½" / G ¾"	12 / 84	12 / 84	342.43 / 360.74
	81	Valve with fine adjustment and M30 x 1.5 connection						
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
	61	Standard valve with M30 x 1.5 connection	L 07 L	L 05 L	G ½" / G ¾"	12 / 84	12 / 84	455.15 / 473.46
	81	Valve with fine adjustment and M30 x 1.5 connection						
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						

L: recommended position for air vent connection

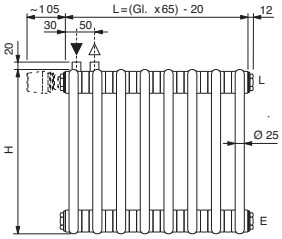
G ½": internal thread; G ¾": external thread

DIMENSIONAL DRAWINGS BUILT-IN VALVE AT TOP

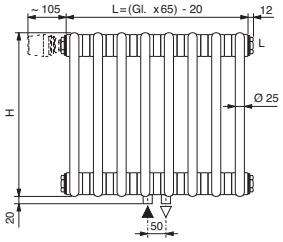
Connection **(69)** at bottom on side[1)]



Connection **(50)** at top on side[1)]



Connection **(98)** at bottom centre[3)]



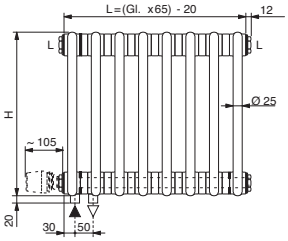
[1)] Minimum length: 4 elements

[3)] Minimum length: 8 elements

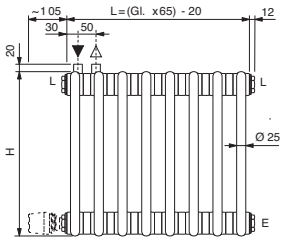
Centre connection only possible with an even number of elements (for uneven number of elements connections are offset right or left)

DIMENSIONAL DRAWINGS BUILT-IN VALVE AT BOTTOM

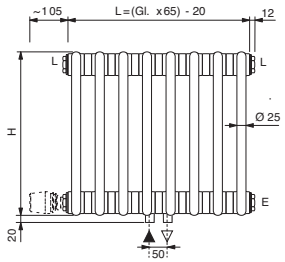
Connection **(69)** at bottom on side[1) 2)]



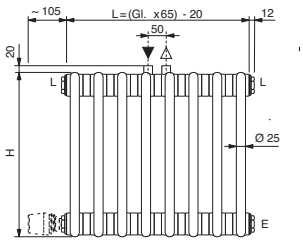
Connection **(50)** at top on side[1)]



Connection **(98)** at bottom centre[2)]



Connection **(07)** at top centre[2)]



[1)] Minimum length: 4 elements

[2)] For design reasons, there is no flow through the first element

[2)] Minimum length: 8 elements

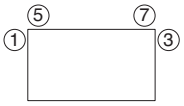
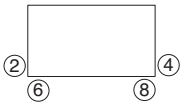
Centre connection only possible with an even number of elements (for uneven number of elements connections are offset right or left)

Note:

Please note the valve performance limits in the section “General information”

For connection images 98 and 96 with built-in valve on the side at bottom, the hot-dip galvanised version is not possible.

AIR VENT AND DRAIN

Description		Feature	Order code	Surcharge per radiator [EUR]
Air vent	**Type**			
	Air vent connection	|8|	4	–
	Built-in air vent with rotatable outlet – standard version	|8|	1	9.83
	No air vent, only if mandatory	|8|	3	–
	Position			
	Position recommended by factory – standard version [1]	|9|	–	–
	Position on request [2]	|9|		23.72
	Connection size			
	G ⅜" internal thread	|10|	38	–
	G ½" internal thread	|10|	12	–
Drain	**Type**			
	No drain, only if mandatory – standard version [3]	|11|	3	–
	Drain connection	|11|	4	–
	Position			
	Position recommended by factory – standard version [1]	|12|	–	–
	Position on request [2]	|12|		23.72
	Connection size			
	G ⅜" internal thread	|13|	38	–
	G ½" internal thread	|13|	12	–

[1] For position see diagrams for arrangement of the connections in the table "Connection options flow/return"

[2] If for technical reasons the connection cannot be placed at the desired position, it will instead be placed in the position recommended by the factory

[3] If for technical reasons a drain connection is necessary, it is built in at the factory as standard

ARBONIA COLUMN RADIATORS:
CAMBIOTHERM®

In the following section, you will find:

- General, tender specifications
- Description
- Technical data
- Prices and outputs
- Connection options and dimensional drawing
- Air vent and drain

CAMBIOTHERM®

The attractive, safe, and insurance-compliant Cambiotherm is a column radiator with a special hub distance. It is ideally suited to the replacement of steel/cast iron radiators in accordance with DIN 4722 (from 1938).

As not only the performance and hub distance, but also the element length (45 mm) match, cost-saving replacement is ensured. The replacement with Cambiotherm can be made without changing the pipes to suit the hub distance.

The Cambiotherm has the technical properties – except height, hub distance, and heat output – of the column radiators.

Note

The element length for steel/cast iron radiators in accordance with DIN 4722 from 1961 is 50 mm. When replacing with Cambiotherm (element length: 45 mm), attention must be paid to the different length.

Special features:

- A fast, efficient, and economical replacement solution
- A classic and timeless design
- Top in quality and comfort
- A uniquely large variety of models
- Powerful and comfortable
- High accident safety (compliant with statutory accident insurance)
- Safe and easy to install in accordance with VDI 6036

TENDER SPECIFICATIONS

Arbonia Cambiotherm®

2–6 columns made of steel; individual elements (length 45 mm) as a welded assembly, consisting of head pieces (band steel pressings) and round precision steel pipes. Blocks welded together from elements up to the maximum length of the delivery unit.

Ready to install with 4 threaded plugs for flow and return as well as for air vent and drain. With identical pipe connection dimensions as with DIN steel radiators and DIN cast iron radiators according to DIN 4703. Edges rounded on all sides with R_{min} = 2 mm.

Coating according to DIN 55900 part 1 and part 2.

Design features comply with the basic principles for the testing of the health and safety of radiators (statutory accident insurance).

Awarded for compliance with demanding hygiene requirements by a laboratory for microbiology and hygiene.

Compressive strength and watertightness tested.

Heat output tested and registered in accordance with EN 442.

Awarded with the RAL quality mark.

CE-compliant.

Suitable for closed water heating systems in accordance with DIN 18380 and water quality in accordance with VDI 2035, ÖNORM H5195 and SWKI BT 102-01.

Maximum permissible operating temperature: 110 °C

Max. operating pressure:

2–6 columns 10 bar / 1000 kPa

2–6 columns 16 bar / 1600 kPa (high-pressure version)

Packed safely for transport.

RANGE AVAILABLE

- 5 depths: 65–225 mm (2–6 columns)
- 7 heights: 270–1070 mm (hub distance: 200–1000 mm)
- More heights (hub distance) on request
- Length:
  - Calculation: number of elements x 45 mm
  - Length gradation: 45 mm (1 element)
  - Minimum length: 270 mm (6 elements)
  - Maximum length see paragraph "Maximum length"
- 2-pipe connections, at side

For Cambiotherm with connections on the same end, from a certain length and height an insert pipe is supplied to guarantee correct water circulation.

MAXIMUM LENGTH

For reasons of weight and transport, Cambiotherm can be delivered ex works in one piece only up to a maximum length. If the maximum length is exceeded in a single piece, then the Cambiotherm will be delivered in several blocks (see price tables).

These blocks will have to be coupled together on site, or if necessary at the factory. The overall length of Cambiotherm is limited to three blocks.

Cambiotherm in high-pressure version cannot be fitted. The overall length for the high-pressure version is thus limited to the number of elements per block.

CAMBIOTHERM®

The attractive, safe, and insurance-compliant Cambiotherm is a column radiator with a special hub distance. It is ideally suited to the replacement of steel/cast iron radiators in accordance with DIN 4722 (from 1938).

As not only the performance and hub distance, but also the element length (45 mm) match, cost-saving replacement is ensured. The replacement with Cambiotherm can be made without changing the pipes to suit the hub distance.

The Cambiotherm has the technical properties – except height, hub distance, and heat output – of the column radiators.

Note

The element length for steel/cast iron radiators in accordance with DIN 4722 from 1961 is 50 mm. When replacing with Cambiotherm (element length: 45 mm), attention must be paid to the different length.

Special features:

- A fast, efficient, and economical replacement solution
- Increased efficiency thanks to preset valves
- A classic and timeless design
- Top in quality and comfort
- A uniquely large variety of models
- Powerful and comfortable
- High accident safety (compliant with statutory accident insurance)
- Safe and easy to install in accordance with VDI 6036

TENDER SPECIFICATIONS

Arbonia Cambiotherm® with built-in valve

2–6 columns made of steel; individual elements (length 45 mm) as a welded assembly, consisting of head pieces (band steel pressings) and round precision steel pipes. Blocks welded together from elements up to the maximum length of the delivery unit.

With integrated, adjustable valve insert. The k_V value is preset at the factory and adjusted to the heat output.

Ready to install with connections for flow and return as well as for air vent. Connection for drain optional. Edges rounded on all sides with R_{min} = 2 mm.

Coating according to DIN 55900 part 1 and part 2.

Design features comply with the basic principles for the testing of the health and safety of radiators (statutory accident insurance).

Awarded for compliance with demanding hygiene requirements by a laboratory for microbiology and hygiene.

Compressive strength and watertightness tested.

Heat output tested and registered in accordance with EN 442.

Awarded with the RAL quality mark.

CE-compliant.

Suitable for hot water heating systems in accordance with DIN 18380 and water quality in accordance with VDI 2035, ÖNORM H5195, and SWKI BT 102-01.

Maximum permissible operating temperature: 110 °C

Max. operating pressure:

2–6 columns 10 bar / 1000 kPa

Packed safely for transport.

RANGE AVAILABLE

- 5 depths: 65–225 mm (2–6 columns)
- 7 heights: 180–1070 mm (hub distance: 200–1000 mm)
- More heights (hub distance) on request
- Length:
  - Calculation: number of elements x 45 mm
  - Length gradation: 45 mm (1 element)
  - Minimum length: 270 mm (6 elements)
  - Maximum length see paragraph "Maximum length"
- factory k_V-preset built-in valve, arranged at top or bottom, right or left
- Standard connection:
  - 2-pipe connection bottom or top, on same side (on the side of the valve) with hub distance 50 mm
  - Connection size: G ½" internal thread
  - Flow welded into the 1st element, return into the 2nd element
  - For the version with valve arranged at the bottom, two air vents are provided
- Thermostatic sensor head is not included in the scope of delivery and must be ordered as an accessory
  - Not available in high-pressure version

MAXIMUM LENGTH

For reasons of weight and transport, Cambiotherm can be delivered ex works in one piece only up to a maximum length. If the maximum length is exceeded in a single piece, then the column radiators will be delivered in several blocks (see price tables).

These blocks will have to be coupled together on site, or if necessary at the factory. The overall length for column radiators is limited to three blocks.

Column radiators in the high-pressure version cannot be fitted. The overall length for the high-pressure version is thus limited to the maximum number of elements per block.

TECHNICAL DATA AND PRICE PER ELEMENT – HEIGHT 270–1070 MM

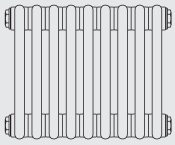
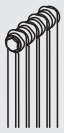
Height H	Depth T		Heat output EN 442				Exponent n	Ø Mass per element M	Surface per element A	Water content per element W	Standard water flow q_m	Radiation component s	Price per element
			Φ ΔT 60 K 90/70/20 °C	**$Φ_L$ ΔT 50 K 75/65/20 °C**	Φ ΔT 42 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C							
[mm]	[mm]	Type	[watt/el.]	**[watt/el.]**	[watt/el.]	[watt/el.]	[ ]	[kg/el.]	[m²/el.]	[l/el.]	[kg/h el.]	[%]	[EUR/el.]
	65	2027	29	**23**	18	12	1.30	0.43	0.04	0.34	1.6	49	32.10
	105	3027	35	**28**	22	14	1.30	0.65	0.07	0.48	2.2	38	34.85
270	145	4027	44	**35**	28	18	1.30	0.86	0.09	0.63	2.8	33	38.54
	185	5027	54	**43**	34	22	1.30	1.14	0.11	0.78	3.6	30	46.04
	225	6027	63	**50**	40	26	1.30	1.37	0.13	0.95	4.2	27	53.83
	65	2037	34	**27**	22	14	1.30	0.55	0.06	0.41	2.2	49	32.99
	105	3037	48	**38**	30	19	1.30	0.83	0.09	0.51	3.1	38	37.07
370	145	4037	60	**48**	38	25	1.30	1.10	0.12	0.67	3.9	33	40.67
	185	5037	73	**58**	47	30	1.30	1.44	0.15	0.83	5.1	30	48.47
	225	6037	86	**68**	55	35	1.30	1.74	0.18	1.00	5.7	27	57.06
	65	2042	39	**31**	25	16	1.30	0.62	0.07	0.45	2.4	49	33.88
	105	3042	54	**43**	34	22	1.30	0.92	0.10	0.58	3.5	38	38.03
420	145	4042	68	**54**	43	28	1.30	1.23	0.13	0.76	4.5	33	42.38
	185	5042	83	**66**	53	34	1.30	1.59	0.17	1.06	5.5	30	50.60
	225	6042	98	**78**	63	40	1.30	1.92	0.20	1.13	6.5	27	59.17
	65	2057	53	**42**	34	21	1.30	0.80	0.09	0.57	3.5	49	36.43
	105	3057	73	**58**	47	30	1.30	1.19	0.14	0.78	4.8	38	41.60
570	145	4057	93	**74**	59	38	1.30	1.59	0.18	1.03	6.1	33	47.11
	185	5057	113	**90**	72	46	1.30	2.05	0.23	1.28	7.4	30	55.87
	225	6057	132	**105**	84	54	1.30	2.47	0.27	1.53	8.8	27	65.92
	65	2067	64	**51**	41	26	1.30	0.92	0.10	0.61	3.8	49	37.94
	105	3067	86	**68**	55	35	1.30	1.37	0.16	0.92	5.7	38	44.61
670	145	4067	108	**86**	69	44	1.30	1.83	0.21	1.21	7.1	33	53.49
	185	5067	133	**106**	85	54	1.30	2.35	0.27	1.51	8.7	30	64.33
	225	6067	156	**124**	99	63	1.30	2.83	0.32	1.80	10.4	27	75.10
	65	2097	91	**72**	58	37	1.30	1.28	0.16	0.92	6.3	49	42.27
	105	3097	124	**99**	79	51	1.30	1.92	0.23	1.33	8.2	38	50.32
970	145	4097	157	**125**	100	64	1.30	2.56	0.31	1.76	10.3	33	66.58
	185	5097	192	**153**	123	78	1.30	3.26	0.40	2.25	13.0	30	77.79
	225	6097	225	**179**	144	91	1.30	3.92	0.47	2.61	15.0	30	91.09
	65	2107	99	**79**	63	40	1.30	1.40	0.18	1.00	6.9	49	43.89
	105	3107	137	**109**	87	56	1.30	2.10	0.26	1.47	9.0	38	56.54
1070	145	4107	174	**138**	111	70	1.30	2.80	0.34	1.94	11.4	33	73.59
	185	5107	213	**169**	136	86	1.30	3.56	0.43	2.41	13.9	30	90.28
	225	6107	249	**198**	159	101	1.30	4.29	0.51	2.88	16.6	27	107.39

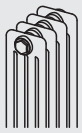
For individual heat output calculations, see "General information"
Length calculation: length in mm = number of elements x 45 mm – 20 mm
Price calculation: price per radiator = length in elements x price per element

Note extra charge for connection images.

PRICES AND OUTPUTS – HEIGHT OF 270 MM

with heat output per element depending on the depth



Type		2027	3027	4027	5027	6027
Order number		**RRN20027...2.XA**	**RRN30027...2.XA**	**RRN40027...2.XA**	**RRN50027...2.XA**	**RRN60027...2.XA**
Height H	[mm]	270	270	270	270	270
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.43	0.65	0.86	1.14	1.37
Exponent n	[ ]	1.3000	1.3000	1.3000	1.3000	1.3000
Standard heat output Φ_L	[watts/el.]	23	28	35	43	50
Price per element	[EUR/el.]	32.10	34.85	38.54	46.04	53.83

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	138	192.60	168	209.10	210	231.24	258	276.24	300	322.98
360	8	184	256.80	224	278.80	280	308.32	344	368.32	400	430.64
450	10	230	321.00	280	348.50	350	385.40	430	460.40	500	538.30
540	12	276	385.20	336	418.20	420	462.48	516	552.48	600	645.96
630	14	322	449.40	392	487.90	490	539.56	602	644.56	700	753.62
720	16	368	513.60	448	557.60	560	616.64	688	736.64	800	861.28
810	18	414	577.80	504	627.30	630	693.72	774	828.72	900	968.94
900	20	460	642.00	560	697.00	700	770.80	860	920.80	1000	1076.60
990	22	506	706.20	616	766.70	770	847.88	946	1012.88	1100	1184.26
1080	24	552	770.40	672	836.40	840	924.96	1032	1104.96	1200	1291.92
1170	26	598	834.60	728	906.10	910	1002.04	1118	1197.04	1300	1399.58
1260	28	644	898.80	784	975.80	980	1079.12	1204	1289.12	1400	1507.24
1350	30	690	963.00	840	1045.50	1050	1156.20	1290	1381.20	1500	1614.90
1440	32	736	1027.20	896	1115.20	1120	1233.28	1376	1473.28	1600	1722.56
1530	34	782	1091.40	952	1184.90	1190	1310.36	1462	1565.36	1700	1830.22
1620	36	828	1155.60	1008	1254.60	1260	1387.44	1548	1657.44	1800	1937.88
1710	38	874	1219.80	1064	1324.30	1330	1464.52	1634	1749.52	1900	2045.54
1800	40	920	1284.00	1120	1394.00	1400	1541.60	1720	1841.60	2000	2153.20
1890	42	966	1348.20	1176	1463.70	1470	1618.68	1806	1933.68	2100	2260.86
1980	44	1012	1412.40	1232	1533.40	1540	1695.76	1892	2025.76	2200	2368.52
2070	46	1058	1476.60	1288	1603.10	1610	1772.84	1978	2117.84	2300	2476.18
2160	48	1104	1540.80	1344	1672.80	1680	1849.92	2064	2209.92	2400	2583.84
2250	50	1150	1605.00	1400	1742.50	1750	1927.00	2150	2302.00	2500	2691.50
2340	52	1196	1669.20	1456	1812.20	1820	2004.08	2236	2394.08	2600	2799.16
2430	54	1242	1733.40	1512	1881.90	1890	2081.16	2322	2486.16	2700	2906.82
2520	56	1288	1797.60	1568	1951.60	1960	2158.24	2408	2578.24	2800	3014.48
2610	58	1334	1861.80	1624	2021.30	2030	2235.32	2494	2670.32	2900	3122.14
2700	60	1380	1926.00	1680	2091.00	2100	2312.40	2580	2762.40	3000	3229.80
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order Cambiotherm column radiators using completely configured order numbers

Cambiotherm column radiators with up to a maximum number of elements per block can be ordered with an order number.

Cambiotherm column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Delivery:

- Cambiotherm column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia Cambiotherm column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Standard Cambiotherm column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 370 MM

with heat output per element depending on the depth

Type		2037	3037	4037	5037	6037
Order number		**RRN20037...2.XA**	**RRN30037...2.XA**	**RRN40037...2.XA**	**RRN50037...2.XA**	**RRN60037...2.XA**
Height H	[mm]	370	370	370	370	370
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.55	0.83	1.10	1.44	1.74
Exponent n	[ ]	1.3000	1.3000	1.3000	1.3000	1.3000
Standard heat output Φ_L	[watts/el.]	27	38	48	58	68
Price per element	[EUR/el.]	32.99	37.07	40.67	48.47	57.06

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	162	197.94	228	222.42	288	244.02	348	290.82	408	342.36
360	8	216	263.92	304	296.56	384	325.36	464	387.76	544	456.48
450	10	270	329.90	380	370.70	480	406.70	580	484.70	680	570.60
540	12	324	395.88	456	444.84	576	488.04	696	581.64	816	684.72
630	14	378	461.86	532	518.98	672	569.38	812	678.58	952	798.84
720	16	432	527.84	608	593.12	768	650.72	928	775.52	1088	912.96
810	18	486	593.82	684	667.26	864	732.06	1044	872.46	1224	1027.08
900	20	540	659.80	760	741.40	960	813.40	1160	969.40	1360	1141.20
990	22	594	725.78	836	815.54	1056	894.74	1276	1066.34	1496	1255.32
1080	24	648	791.76	912	889.68	1152	976.08	1392	1163.28	1632	1369.44
1170	26	702	857.74	988	963.82	1248	1057.42	1508	1260.22	1768	1483.56
1260	28	756	923.72	1064	1037.96	1344	1138.76	1624	1357.16	1904	1597.68
1350	30	810	989.70	1140	1112.10	1440	1220.10	1740	1454.10	2040	1711.80
1440	32	864	1055.68	1216	1186.24	1536	1301.44	1856	1551.04	2176	1825.92
1530	34	918	1121.66	1292	1260.38	1632	1382.78	1972	1647.98	2312	1940.04
1620	36	972	1187.64	1368	1334.52	1728	1464.12	2088	1744.92	2448	2054.16
1710	38	1026	1253.62	1444	1408.66	1824	1545.46	2204	1841.86	2584	2168.28
1800	40	1080	1319.60	1520	1482.80	1920	1626.80	2320	1938.80	2720	2282.40
1890	42	1134	1385.58	1596	1556.94	2016	1708.14	2436	2035.74	2856	2396.52
1980	44	1188	1451.56	1672	1631.08	2112	1789.48	2552	2132.68	2992	2510.64
2070	46	1242	1517.54	1748	1705.22	2208	1870.82	2668	2229.62	3128	2624.76
2160	48	1296	1583.52	1824	1779.36	2304	1952.16	2784	2326.56	3264	2738.88
2250	50	1350	1649.50	1900	1853.50	2400	2033.50	2900	2423.50	3400	2853.00
2340	52	1404	1715.48	1976	1927.64	2496	2114.84	3016	2520.44	3536	2967.12
2430	54	1458	1781.46	2052	2001.78	2592	2196.18	3132	2617.38	3672	3081.24
2520	56	1512	1847.44	2128	2075.92	2688	2277.52	3248	2714.32	3808	3195.36
2610	58	1566	1913.42	2204	2150.06	2784	2358.86	3364	2811.26	3944	3309.48
2700	60	1620	1979.40	2280	2224.20	2880	2440.20	3480	2908.20	4080	3423.60
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Caution!

Only the connection arrangements 12, 34, 14, 32, 23, and 41 are suitable for the replacement of steel/cast iron radiators according to DIN 4722.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Additional charge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

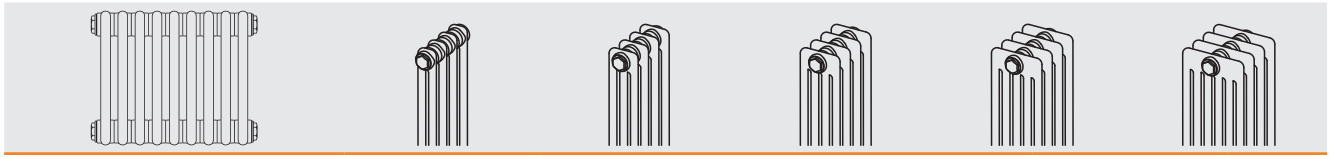
Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Additional charge
31, 41, 32, and 42	Valve on side at top	69 and 89	243.66 €
		96 and 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

The orange printed information on the connection system and connection arrangement can be ordered via the order number.

PRICES AND OUTPUTS – HEIGHT OF 420 MM

with heat output per element depending on the depth



Type		2042	3042	4042	5042	6042
Order number		**RRN20042...2.XA**	**RRN30042...2.XA**	**RRN40042...2.XA**	**RRN50042...2.XA**	**RRN60042...2.XA**
Height H	[mm]	420	420	420	420	420
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.62	0.92	1.23	1.59	1.92
Exponent n	[ ]	1.3000	1.3000	1.3000	1.3000	1.3000
Standard heat output Φ_L	[watts/el.]	31	43	54	66	78
Price per element	[EUR/el.]	33.88	38.03	42.38	50.60	59.17

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	186	203.28	258	228.18	324	254.28	396	303.60	468	355.02
360	8	248	271.04	344	304.24	432	339.04	528	404.80	624	473.36
450	10	310	338.80	430	380.30	540	423.80	660	506.00	780	591.70
540	12	372	406.56	516	456.36	648	508.56	792	607.20	936	710.04
630	14	434	474.32	602	532.42	756	593.32	924	708.40	1092	828.38
720	16	496	542.08	688	608.48	864	678.08	1056	809.60	1248	946.72
810	18	558	609.84	774	684.54	972	762.84	1188	910.80	1404	1065.06
900	20	620	677.60	860	760.60	1080	847.60	1320	1012.00	1560	1183.40
990	22	682	745.36	946	836.66	1188	932.36	1452	1113.20	1716	1301.74
1080	24	744	813.12	1032	912.72	1296	1017.12	1584	1214.40	1872	1420.08
1170	26	806	880.88	1118	988.78	1404	1101.88	1716	1315.60	2028	1538.42
1260	28	868	948.64	1204	1064.84	1512	1186.64	1848	1416.80	2184	1656.76
1350	30	930	1016.40	1290	1140.90	1620	1271.40	1980	1518.00	2340	1775.10
1440	32	992	1084.16	1376	1216.96	1728	1356.16	2112	1619.20	2496	1893.44
1530	34	1054	1151.92	1462	1293.02	1836	1440.92	2244	1720.40	2652	2011.78
1620	36	1116	1219.68	1548	1369.08	1944	1525.68	2376	1821.60	2808	2130.12
1710	38	1178	1287.44	1634	1445.14	2052	1610.44	2508	1922.80	2964	2248.46
1800	40	1240	1355.20	1720	1521.20	2160	1695.20	2640	2024.00	3120	2366.80
1890	42	1302	1422.96	1806	1597.26	2268	1779.96	2772	2125.20	3276	2485.14
1980	44	1364	1490.72	1892	1673.32	2376	1864.72	2904	2226.40	3432	2603.48
2070	46	1426	1558.48	1978	1749.38	2484	1949.48	3036	2327.60	3588	2721.82
2160	48	1488	1626.24	2064	1825.44	2592	2034.24	3168	2428.80	3744	2840.16
2250	50	1550	1694.00	2150	1901.50	2700	2119.00	3300	2530.00	3900	2958.50
2340	52	1612	1761.76	2236	1977.56	2808	2203.76	3432	2631.20	4056	3076.84
2430	54	1674	1829.52	2322	2053.62	2916	2288.52	3564	2732.40	4212	3195.18
2520	56	1736	1897.28	2408	2129.68	3024	2373.28	3696	2833.60	4368	3313.52
2610	58	1798	1965.04	2494	2205.74	3132	2458.04	3828	2934.80	4524	3431.86
2700	60	1860	2032.80	2580	2281.80	3240	2542.80	3960	3036.00	4680	3550.20
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order Cambiotherm column radiators using completely configured order numbers

Cambiotherm column radiators with up to a maximum number of elements per block can be ordered with an order number.

Cambiotherm column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Delivery:

- Cambiotherm column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia Cambiotherm column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Standard Cambiotherm column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 570 MM

with heat output per element depending on the depth

Type		2057	3057	4057	5057	6057
Order number		**RRN20057...2.XA**	**RRN30057...2.XA**	**RRN40057...2.XA**	**RRN50057...2.XA**	**RRN60057...2.XA**
Height H	[mm]	570	570	570	570	570
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.80	1.19	1.59	2.05	2.47
Exponent n	[ ]	1.3000	1.3000	1.3000	1.3000	1.3000
Standard heat output Φ_L	[watts/el.]	42	58	74	90	105
Price per element	[EUR/el.]	36.43	41.60	47.11	55.87	65.92

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	252	218.58	348	249.60	444	282.66	540	335.22	630	395.52
360	8	336	291.44	464	332.80	592	376.88	720	446.96	840	527.36
450	10	420	364.30	580	416.00	740	471.10	900	558.70	1050	659.20
540	12	504	437.16	696	499.20	888	565.32	1080	670.44	1260	791.04
630	14	588	510.02	812	582.40	1036	659.54	1260	782.18	1470	922.88
720	16	672	582.88	928	665.60	1184	753.76	1440	893.92	1680	1054.72
810	18	756	655.74	1044	748.80	1332	847.98	1620	1005.66	1890	1186.56
900	20	840	728.60	1160	832.00	1480	942.20	1800	1117.40	2100	1318.40
990	22	924	801.46	1276	915.20	1628	1036.42	1980	1229.14	2310	1450.24
1080	24	1008	874.32	1392	998.40	1776	1130.64	2160	1340.88	2520	1582.08
1170	26	1092	947.18	1508	1081.60	1924	1224.86	2340	1452.62	2730	1713.92
1260	28	1176	1020.04	1624	1164.80	2072	1319.08	2520	1564.36	2940	1845.76
1350	30	1260	1092.90	1740	1248.00	2220	1413.30	2700	1676.10	3150	1977.60
1440	32	1344	1165.76	1856	1331.20	2368	1507.52	2880	1787.84	3360	2109.44
1530	34	1428	1238.62	1972	1414.40	2516	1601.74	3060	1899.58	3570	2241.28
1620	36	1512	1311.48	2088	1497.60	2664	1695.96	3240	2011.32	3780	2373.12
1710	38	1596	1384.34	2204	1580.80	2812	1790.18	3420	2123.06	3990	2504.96
1800	40	1680	1457.20	2320	1664.00	2960	1884.40	3600	2234.80	4200	2636.80
1890	42	1764	1530.06	2436	1747.20	3108	1978.62	3780	2346.54	4410	2768.64
1980	44	1848	1602.92	2552	1830.40	3256	2072.84	3960	2458.28	4620	2900.48
2070	46	1932	1675.78	2668	1913.60	3404	2167.06	4140	2570.02	4830	3032.32
2160	48	2016	1748.64	2784	1996.80	3552	2261.28	4320	2681.76	5040	3164.16
2250	50	2100	1821.50	2900	2080.00	3700	2355.50	4500	2793.50	5250	3296.00
2340	52	2184	1894.36	3016	2163.20	3848	2449.72	4680	2905.24	5460	3427.84
2430	54	2268	1967.22	3132	2246.40	3996	2543.94	4860	3016.98	5670	3559.68
2520	56	2352	2040.08	3248	2329.60	4144	2638.16	5040	3128.72	5880	3691.52
2610	58	2436	2112.94	3364	2412.80	4292	2732.38	5220	3240.46	6090	3823.36
2700	60	2520	2185.80	3480	2496.00	4440	2826.60	5400	3352.20	6300 ⋈	3955.20
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Caution!

Only the connection arrangements 12, 34, 14, 32, 23, and 41 are suitable for the replacement of steel/cast iron radiators according to DIN 4722.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Additional charge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

Connection surcharge (per radiator) **with built-in valve**

Connection system		Connection arrangement	Additional charge
		69 and 89	243.66 €
31, 41, 32, and 42	Valve on side at top	**96 and 98**	356.38 €
		50 and 70	243.66 €
		69, 89, 50, and 70	342.43 €
61, 81, 62, and 82	Valve on side at bottom	96 and 98	455.15 €
		05 and 07	455.15 €

The orange printed information on the connection system and connection arrangement can be ordered via the order number.

PRICES AND OUTPUTS – HEIGHT OF 670 MM

with heat output per element depending on the depth

Type		2067	3067	4067	5067	6067
Order number		**RRN20067...2.XA**	**RRN30067...2.XA**	**RRN40067...2.XA**	**RRN50067...2.XA**	**RRN60067...2.XA**
Height H	[mm]	670	670	670	670	670
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	0.92	1.37	1.83	2.35	2.83
Exponent n	[ ]	1.3000	1.3000	1.3000	1.3000	1.3000
Standard heat output Φ_L	[watts/el.]	51	68	86	106	124
Price per element	[EUR/el.]	37.94	44.61	53.49	64.33	75.10

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	306	227.64	408	267.66	516	320.94	636	385.98	744	450.60
360	8	408	303.52	544	356.88	688	427.92	848	514.64	992	600.80
450	10	510	379.40	680	446.10	860	534.90	1060	643.30	1240	751.00
540	12	612	455.28	816	535.32	1032	641.88	1272	771.96	1488	901.20
630	14	714	531.16	952	624.54	1204	748.86	1484	900.62	1736	1051.40
720	16	816	607.04	1088	713.76	1376	855.84	1696	1029.28	1984	1201.60
810	18	918	682.92	1224	802.98	1548	962.82	1908	1157.94	2232	1351.80
900	20	1020	758.80	1360	892.20	1720	1069.80	2120	1286.60	2480	1502.00
990	22	1122	834.68	1496	981.42	1892	1176.78	2332	1415.26	2728	1652.20
1080	24	1224	910.56	1632	1070.64	2064	1283.76	2544	1543.92	2976	1802.40
1170	26	1326	986.44	1768	1159.86	2236	1390.74	2756	1672.58	3224	1952.60
1260	28	1428	1062.32	1904	1249.08	2408	1497.72	2968	1801.24	3472	2102.80
1350	30	1530	1138.20	2040	1338.30	2580	1604.70	3180	1929.90	3720	2253.00
1440	32	1632	1214.08	2176	1427.52	2752	1711.68	3392	2058.56	3968	2403.20
1530	34	1734	1289.96	2312	1516.74	2924	1818.66	3604	2187.22	4216	2553.40
1620	36	1836	1365.84	2448	1605.96	3096	1925.64	3816	2315.88	4464	2703.60
1710	38	1938	1441.72	2584	1695.18	3268	2032.62	4028	2444.54	4712	2853.80
1800	40	2040	1517.60	2720	1784.40	3440	2139.60	4240	2573.20	4960	3004.00
1890	42	2142	1593.48	2856	1873.62	3612	2246.58	4452	2701.86	5208	3154.20
1980	44	2244	1669.36	2992	1962.84	3784	2353.56	4664	2830.52	5456	3304.40
2070	46	2346	1745.24	3128	2052.06	3956	2460.54	4876	2959.18	5704	3454.60
2160	48	2448	1821.12	3264	2141.28	4128	2567.52	5088	3087.84	5952	3604.80
2250	50	2550	1897.00	3400	2230.50	4300	2674.50	5300	3216.50	6200 ⋈	3755.00
2340	52	2652	1972.88	3536	2319.72	4472	2781.48	5512	3345.16	6448 ⋈	3905.20
2430	54	2754	2048.76	3672	2408.94	4644	2888.46	5724	3473.82	6696 ⋈	4055.40
2520	56	2856	2124.64	3808	2498.16	4816	2995.44	5936	3602.48	6944 ⋈	4205.60
2610	58	2958	2200.52	3944	2587.38	4988	3102.42	6148 ⋈	3731.14	7192 ⋈	4355.80
2700	60	3060	2276.40	4080	2676.60	5160	3209.40	6360 ⋈	3859.80	7440 ⋈	4506.00
Maximum number of elements per block		66		66		66		66		66	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order Cambiotherm column radiators using completely configured order numbers

Cambiotherm column radiators with up to a maximum number of elements per block can be ordered with an order number.

Cambiotherm column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Delivery:

- Cambiotherm column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia Cambiotherm column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Standard Cambiotherm column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

PRICES AND OUTPUTS – HEIGHT OF 970 MM

with heat output per element depending on the depth

Type		2097	3097	4097	5097	6097
Order number		**RRN20097...2.XA**	**RRN30097...2.XA**	**RRN40097...2.XA**	**RRN50097...2.XA**	**RRN60097...2.XA**
Height H	[mm]	970	970	970	970	970
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.28	1.92	2.56	3.26	3.92
Exponent n	[ ]	1.3000	1.3000	1.3000	1.3000	1.3000
Standard heat output Φ_L	[watts/el.]	72	99	125	153	179
Price per element	[EUR/el.]	42.27	50.32	66.58	77.79	91.09

Length L	Length	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price	Φ_S ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	432	253.62	594	301.92	750	399.48	918	466.74	1074	546.54
360	8	576	338.16	792	402.56	1000	532.64	1224	622.32	1432	728.72
450	10	720	422.70	990	503.20	1250	665.80	1530	777.90	1790	910.90
540	12	864	507.24	1188	603.84	1500	798.96	1836	933.48	2148	1093.08
630	14	1008	591.78	1386	704.48	1750	932.12	2142	1089.06	2506	1275.26
720	16	1152	676.32	1584	805.12	2000	1065.28	2448	1244.64	2864	1457.44
810	18	1296	760.86	1782	905.76	2250	1198.44	2754	1400.22	3222	1639.62
900	20	1440	845.40	1980	1006.40	2500	1331.60	3060	1555.80	3580	1821.80
990	22	1584	929.94	2178	1107.04	2750	1464.76	3366	1711.38	3938	2003.98
1080	24	1728	1014.48	2376	1207.68	3000	1597.92	3672	1866.96	4296	2186.16
1170	26	1872	1099.02	2574	1308.32	3250	1731.08	3978	2022.54	4654	2368.34
1260	28	2016	1183.56	2772	1408.96	3500	1864.24	4284	2178.12	5012	2550.52
1350	30	2160	1268.10	2970	1509.60	3750	1997.40	4590	2333.70	5370	2732.70
1440	32	2304	1352.64	3168	1610.24	4000	2130.56	4896	2489.28	5728	2914.88
1530	34	2448	1437.18	3366	1710.88	4250	2263.72	5202	2644.86	6086	3097.06
1620	36	2592	1521.72	3564	1811.52	4500	2396.88	5508	2800.44	6444 ⋈	3279.24
1710	38	2736	1606.26	3762	1912.16	4750	2530.04	5814	2956.02	6802 ⋈	3461.42
1800	40	2880	1690.80	3960	2012.80	5000	2663.20	6120 ⋈	3111.60	7160 ⋈	3643.60
1890	42	3024	1775.34	4158	2113.44	5250	2796.36	6426 ⋈	3267.18	7518 ⋈	3825.78
1980	44	3168	1859.88	4356	2214.08	5500	2929.52	6732 ⋈	3422.76	7876 ⋈	4007.96
2070	46	3312	1944.42	4554	2314.72	5750	3062.68	7038 ⋈	3578.34	8234 ⋈	4190.14
2160	48	3456	2028.96	4752	2415.36	6000	3195.84	7344 ⋈	3733.92	8592 ⋈	4372.32
2250	50	3600	2113.50	4950	2516.00	6250	3329.00	7650 ⋈	3889.50	8950 ⋈	4554.50
2340	52	3744	2198.04	5148	2616.64	6500	3462.16	7956 ⋈	4045.08	9308 ⋈	4736.68
2430	54	3888	2282.58	5346	2717.28	6750	3595.32	8262 ⋈	4200.66	9666 ⋈	4918.86
2520	56	4032	2367.12	5544	2817.92	7000	3728.48	8568 ⋈	4356.24	10024 ⋈	5101.04
2610	58	4176	2451.66	5742	2918.56	7250	3861.64	8874 ⋈	4511.82	10382 ⋈	5283.22
2700	60	4320	2536.20	5940	3019.20	7500	3994.80	9180 ⋈	4667.40	10740 ⋈	5465.40
Maximum number of elements per block		66		66		66		66		58	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Mass per radiator > 125 kg (empty weight)

Standard heat output Φ_L and Φ_S at 75 / 65 / 20 °C (ΔT 50 K) acc. to EN 442

⋈ The version with connection image 69, 89, 96, 98, 50, 70, 07, 05 is not available with built-in valve.

Caution!

Only the connection arrangements 12, 34, 14, 32, 23, and 41 are suitable for the replacement of steel/cast iron radiators according to DIN 4722.

Connection surcharge (per radiator) **without built-in valve**

Connection system	Connection arrangement	Additional charge
	12, 34, 14, and 32	–
	24 and 42	22.30 €
2	13, 31, 23, and 41	53.65 €
	68, 86, 58, 76, 69, 89, 50, and 70	113.91 €
	57, 75, 67, 85, 96, 98, 05 and 07	156.83 €

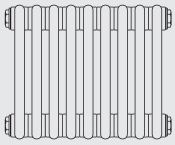
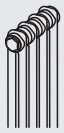
Connection surcharge (per radiator) **with built-in valve**

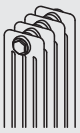
Connection system		Connection arrangement	Additional charge
31, 41, 32, and 42	Valve on side at top	69 and 89	243.66 €
		96 and 98	356.38 €
		50 and 70	243.66 €
61, 81, 62, and 82	Valve on side at bottom	69, 89, 50, and 70	342.43 €
		96 and 98	455.15 €
		05 and 07	455.15 €

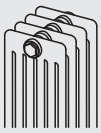
The orange printed information on the connection system and connection arrangement can be ordered via the order number.

PRICES AND OUTPUTS – HEIGHT OF 1070 MM

with heat output per element depending on the depth





Type		2107	3107	4107	5107	6107
Order number		RRN20107...2.XA	RRN30107...2.XA	RRN40107...2.XA	RRN50107...2.XA	RRN60107...2.XA
Height H	[mm]	1070	1070	1070	1070	1070
Depth T	[mm]	65	105	145	185	225
Ø Mass per element M	[kg/el.]	1.40	2.10	2.80	3.56	4.29
Exponent n	[ ]	1.3000	1.3000	1.3000	1.3000	1.3000
Standard heat output Φ_L	[watts/el.]	79	109	138	169	198
Price per element	[EUR/el.]	43.89	56.54	73.59	90.28	107.39

Length L	Length	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price	Φ_s ΔT 50 K	Price
[mm]	[el.]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]	[watt]	[EUR]
270	6	474	263.34	654	339.24	828	441.54	1014	541.68	1188	644.34
360	8	632	351.12	872	452.32	1104	588.72	1352	722.24	1584	859.12
450	10	790	438.90	1090	565.40	1380	735.90	1690	902.80	1980	1073.90
540	12	948	526.68	1308	678.48	1656	883.08	2028	1083.36	2376	1288.68
630	14	1106	614.46	1526	791.56	1932	1030.26	2366	1263.92	2772	1503.46
720	16	1264	702.24	1744	904.64	2208	1177.44	2704	1444.48	3168	1718.24
810	18	1422	790.02	1962	1017.72	2484	1324.62	3042	1625.04	3564	1933.02
900	20	1580	877.80	2180	1130.80	2760	1471.80	3380	1805.60	3960	2147.80
990	22	1738	965.58	2398	1243.88	3036	1618.98	3718	1986.16	4356	2362.58
1080	24	1896	1053.36	2616	1356.96	3312	1766.16	4056	2166.72	4752	2577.36
1170	26	2054	1141.14	2834	1470.04	3588	1913.34	4394	2347.28	5148	2792.14
1260	28	2212	1228.92	3052	1583.12	3864	2060.52	4732	2527.84	5544	3006.92
1350	30	2370	1316.70	3270	1696.20	4140	2207.70	5070	2708.40	5940	3221.70
1440	32	2528	1404.48	3488	1809.28	4416	2354.88	5408	2888.96	6336 ⋈	3436.48
1530	34	2686	1492.26	3706	1922.36	4692	2502.06	5746	3069.52	6732 ⋈	3651.26
1620	36	2844	1580.04	3924	2035.44	4968	2649.24	6084	3250.08	7128 ⋈	3866.04
1710	38	3002	1667.82	4142	2148.52	5244	2796.42	6422 ⋈	3430.64	7524 ⋈	4080.82
1800	40	3160	1755.60	4360	2261.60	5520	2943.60	6760 ⋈	3611.20	7920 ⋈	4295.60
1890	42	3318	1843.38	4578	2374.68	5796	3090.78	7098 ⋈	3791.76	8316 ⋈	4510.38
1980	44	3476	1931.16	4796	2487.76	6072	3237.96	7436 ⋈	3972.32	8712 ⋈	4725.16
2070	46	3634	2018.94	5014	2600.84	6348 ⋈	3385.14				
2160	48	3792	2106.72	5232	2713.92	6624 ⋈	3532.32				
2250	50	3950	2194.50	5450	2827.00	6900 ⋈	3679.50				
2340	52	4108	2282.28	5668	2940.08	7176 ⋈	3826.68				
2430	54	4266	2370.06	5886	3053.16	7452 ⋈	3973.86				
2520	56	4424	2457.84	6104	3166.24	7728 ⋈	4121.04				
2610	58	4582	2545.62	6322 ⋈	3279.32	8004 ⋈	4268.22				
2700	60	4740	2633.40	6540 ⋈	3392.40	8280 ⋈	4415.40				
Maximum number of elements per block		66		66		66		44		44	
Maximum number of elements for second block / third block		22 / 22		22 / 22		22 / 22		22 / 22		22 / 22	

Order Cambiotherm column radiators using completely configured order numbers

Cambiotherm column radiators with up to a maximum number of elements per block can be ordered with an order number.

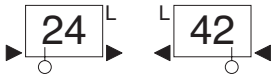
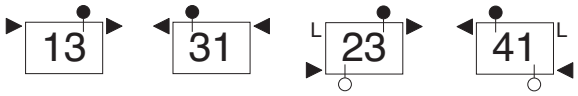
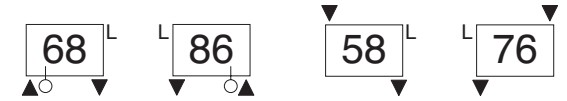
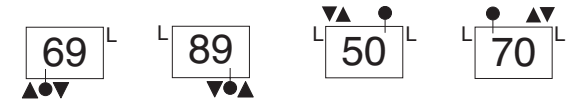
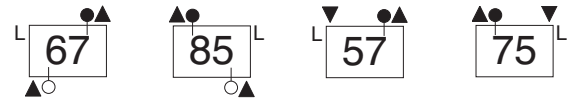
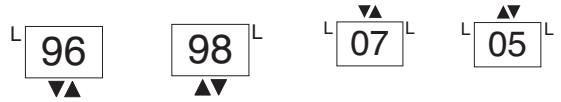
Cambiotherm column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

A delivery in several blocks/parts with an order number is not possible.

Delivery:

- Cambiotherm column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Version 1:
  - Arbonia Cambiotherm column radiator; standard without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; colour RAL 9016 white; air vent and blanking plug are included.
- Version 2:
  - Standard Cambiotherm column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; colour RAL 9016 white; air vent is installed.

2-PIPE CONNECTIONS WITHOUT BUILT-IN VALVE

Connection system	Ordering code |5|	ζ value	Position ordering code |6|	Connection size	Ordering code |7| Flow	Ordering code |7| Return	Surcharge per radiator [EUR]
2-pipe, side	2	2.5		G ⅜" G ½" G ¾" G 1"			–
2-pipe, on side	2	2.5		G ⅜" G ½" G ¾" G 1"			22.30
2-pipe, side	2	2.5		G ⅜" G ½" G ¾" G 1"			53.65
2-pipe, from bottom, from top	2	2.5		G ⅜" G ½" G ¾"	38 12 34 10	38 12 34 10	113.91
2-pipe, from bottom, from top, side by side	2	2.5		G ⅜" G ½"			
2-pipe, from bottom, from top	2	2.5		G ⅜" G ½" G ¾"			156.83
2-pipe, from bottom, from top, centre	2	2.5		G ½"			
Special connections – design according to drawing – ordering code |5| = 99							On request

L: recommended position for air vent connection;

○ Standard cut-off wheel; ● 100 % tight cut-off wheel

Caution!

Only the connection arrangements 12, 34, 14, 32, 23, and 41 are suitable for the replacement of steel/cast iron radiators according to DIN 4722.

The connection options 69, 89, 50, 70, 96, 98, 07, and 05 are not possible for all lengths (see price and output tables).

Starting from height of 1800 mm, a drain is additionally installed for process engineering reasons.

Order Cambiotherm column radiators using completely configured order numbers

Cambiotherm column radiators with up to a maximum number of elements per block can be ordered with an order number.

Cambiotherm column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

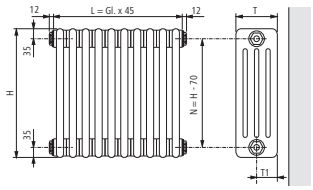
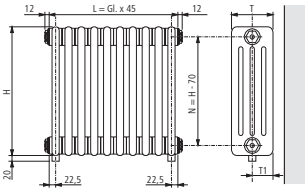
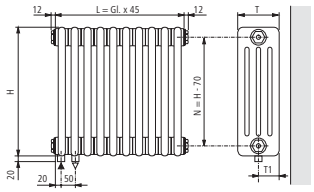
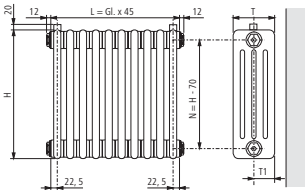
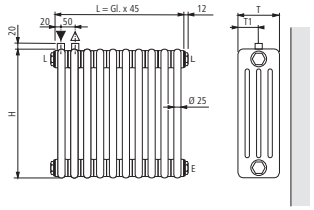
A delivery in several blocks/parts with an order number is not possible.

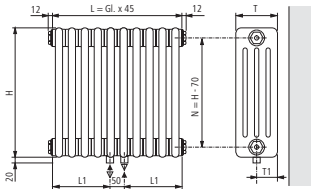
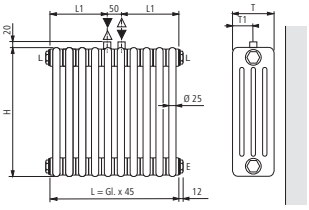
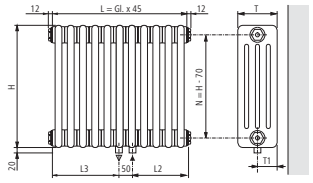
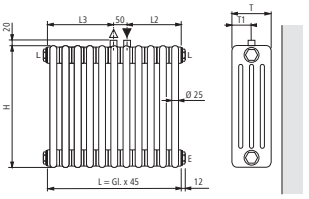
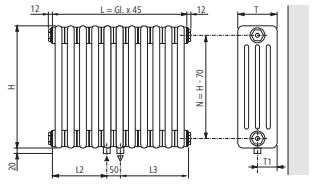
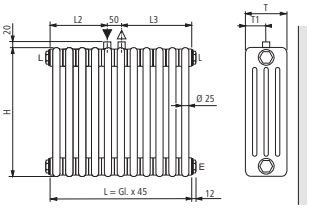
Code for the order number at position 13

R R N . . . . . 2 X A

- Cambiotherm column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
- Cambiotherm column radiator without built-in valve; 2-pipe connection with 4 x ½" connections for connection image 12, 34, 14, or 32; air vent and blanking plug are included.

DIMENSIONAL DRAWINGS FOR CAMBIOTHERM

2-pipe, side	2-pipe, from bottom, from top	2 pipe, from bottom, from top, side by side
		
		

2-pipe, from bottom, centre	2-pipe, from top, centre
	
even no. of elements (96 / 98)	even no. of elements (05 / 07)
	
uneven no. of elements (96)	uneven no. of elements (05)
	
uneven no. of elements (98)	uneven no. of elements (07)

L1: ½ x el. x 45 – 25
L2: ½ x (el. – 1) x 45 – 25
L3: ½ x (el. + 1) x 45 – 25

H: height
L: length
N: hub distance

Number of columns	T [mm]	T1 [mm]
2 columns	65	32.5
3 columns	105	52.5
4 columns	145	72.5
5 columns	185	92.5
6 columns	225	112.5

2-PIPE CONNECTIONS WITH BUILT-IN VALVE

General

In this special version of the column radiator, a factory k_v preset valve is built in.

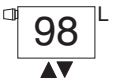
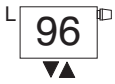
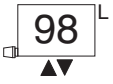
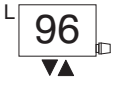
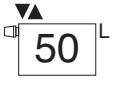
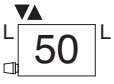
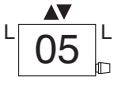
- Maximum length as with column radiators or Cambiotherm without built-in valve (see "Maximum length"):
  - Can be nippled with valve arranged at top (delivery in sub-blocks possible)
  - Cannot be nippled with valve arranged at bottom (delivered in a single piece)
- Surface finish as with column radiators without built-in valve

Range available

- Factory k_v-preset built-in valve, arranged at top or bottom, right or left
- Standard connection:
  - 2-pipe connection bottom or top, on same side (on the side of the valve) or centre with hub distance 50 mm
  - Connection size: G ½" internal thread or G ¾" external thread
  - Flow welded into the 1st element, return into the 2nd element
  - For the version with valve arranged at the bottom, two air vents are provided
- Thermostatic sensor head is not included in the scope of delivery and must be ordered as an accessory
- Not available in high-pressure version

Special versions

- 2-pipe connections (for valve arranged at top or bottom, on request):
  - From top, on alternating sides
- Version as additional block that can be nippled:
  - With valve arranged at top
  - Length 2 elements
- Column radiator, angled or curved version:
  - With valve arranged at top
  - The first three elements in each case cannot be angled or bent
- In the case of a connection from top, the heat output can be reduced

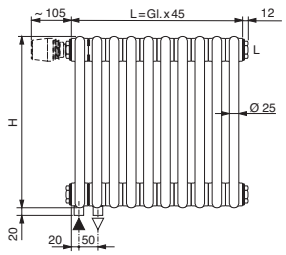
Connection system	Ordering code |5|		Position ordering code |6|		Conn. size	Ordering code |7| Flow	Return	Surcharge per radiator [EUR]
2-pipe from bottom, built-in valve integrated on side at top	31	Standard valve insert with M30 x 1.5 connection			G ½"	12	12	243.66
	41	Valve with fine adjustment and M 30 x 1.5 connection			G ¾"	84	84	261.97
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
	31	Standard valve insert with M30 x 1.5 connection			G ½"	12	12	356.38
	41	Valve with fine adjustment and M 30 x 1.5 connection			G ¾"	84	84	374.69
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
2-pipe from bottom, built-in valve integrated laterally at the bottom	61	Standard valve insert with M30 x 1.5 connection			G ½"	12	12	342.43
	81	Valve with fine adjustment and M 30 x 1.5 connection			G ¾"	84	84	360.74
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
	61	Standard valve insert with M30 x 1.5 connection			G ½"	12	12	455.15
	81	Valve with fine adjustment and M 30 x 1.5 connection			G ¾"	84	84	473.46
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
2-pipe from top, built-in valve integrated laterally on top	31	Standard valve insert with M30 x 1.5 connection			G ½"	12	12	243.66
	41	Valve with fine adjustment and M 30 x 1.5 connection			G ¾"	84	84	261.97
	32	Standard valve with clamp connection						
	42	Valve with fine adjustment and clamp connection						
2-pipe from top, built-in valve integrated laterally at the bottom	61	Standard valve insert with M30 x 1.5 connection			G ½"	12	12	342.43
	81	Valve with fine adjustment and M 30 x 1.5 connection			G ¾"	84	84	360.74
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						
	61	Standard valve insert with M30 x 1.5 connection			G ½"	12	12	455.15
	81	Valve with fine adjustment and M 30 x 1.5 connection			G ¾"	84	84	473.46
	62	Standard valve with clamp connection						
	82	Valve with fine adjustment and clamp connection						

L: recommended position for air vent connection

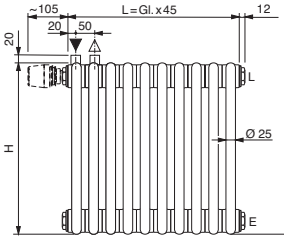
G ½": internal thread; G ¾": external thread

DIMENSIONAL DRAWINGS BUILT-IN VALVE AT TOP

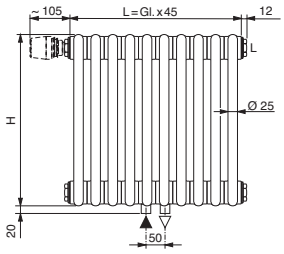
Connection **(69)** bottom side [1]



Connection **(50)** top side [1]



Connection **(98)** bottom centre [3]



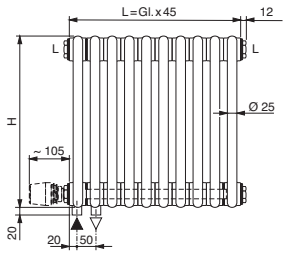
[1] Minimum length: 4 elements

[3] Minimum length: 8 elements

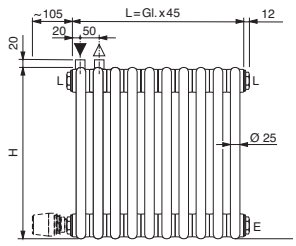
Centre connection only possible with an even number of elements
(with uneven number of elements, connections are offset right or left)

DIMENSIONAL DRAWINGS BUILT-IN VALVE AT BOTTOM

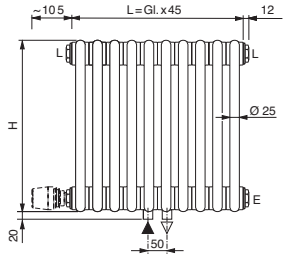
Connection **(69)** bottom side [1] [2]



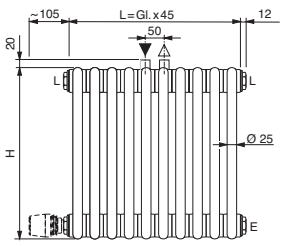
Connection **(50)** top side [1]



Connection **(98)** bottom centre [3]



Connection **(07)** top centre [3]



[1] Minimum length: 4 elements

[2] For design reasons, there is no flow through the first element

[3] Minimum length: 8 elements

Centre connection only possible with an even number of elements
(with uneven number of elements, connections are offset right or left)

Note:

Please note the valve performance limits in the section "General information"

For connection image 98 and 96 with built-in valve on the side bottom, the hot-dip galvanised version is not possible.

Order Cambiotherm column radiators using completely configured order numbers

Cambiotherm column radiators with up to a maximum number of elements per block can be ordered with an order number.

Cambiotherm column radiators with more than the maximum number of elements per block can still be ordered in the usual way with the model number and the corresponding configuration. The delivery then takes place in several blocks/parts.

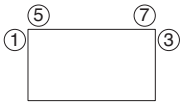
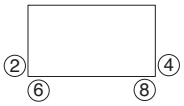
A delivery in several blocks/parts with an order number is not possible.

Code for the order number at position 13

R R V . . . . . 6 X A

- Cambiotherm column radiator (2, 3, 4, 5, or 6 columns)
  - Note the maximum possible sizes.
  - Cambiotherm column radiator with built-in valve; standard valve with connection M30x1.5; 2-pipe connection bottom centre with 2 x ½" connections with hub distance 50 mm for connection image 96 or 98; air vent is installed.

AIR VENT AND DRAIN

Description		Feature	Ordering code	Surcharge per radiator [EUR]
Air vent	**Type**			
	Air vent connection	|8|	4	–
	Built-in air vent with rotatable outlet – standard version	|8|	1	9.83
	No air vent, only if imperative	|8|	3	–
	Position			
	Position recommended by factory – standard version [1]	|9|	–	–
	Position on request [2]	|9|		23.72
	Connection size			
	G ⅜" internal thread	|10|	38	–
	G ½" internal thread	|10|	12	–
Drain	**Type**			
	No drain, only if imperative – standard version [3]	|11|	3	–
	Drain connection	|11|	4	–
	Position			
	Position recommended by factory – standard version [1]	|12|	–	–
	Position on request [2]	|12|		23.72
	Connection size			
	G ⅜" internal thread	|13|	38	–
	G ½" internal thread	|13|	12	–

[1] For position see diagrams for arrangement of the connections in the table "Connection options flow/return"

[2] If for technical reasons the connection cannot be placed at the desired position, it will instead be placed in the position recommended by the factory

[3] If for technical reasons drain connection is necessary, it is built-in at the factory as standard

ARBONIA COLUMN RADIATORS:
BENCH RADIATOR

In the following section, you will find:

- General, tender specifications
- Description
- Technical data
- Prices and outputs
- Connection options and dimensional drawing
- Air vent and drain

BENCH RADIATORS

You have made a good choice when you decide to install Arbonia bench radiators. These beautiful, top quality, state-of-the-art products provide the comfort that a discerning developer expects: More comfort thanks to the ideal distribution of the heat through radiation and convection, more options thanks to the wide range of radiator dimensions available, but also more safety (complies with statutory accident insurance conditions), as they have no corners or sharp edges. This is a valuable advantage, particularly in schools. Arbonia bench radiators are also greatly appreciated in public buildings, institutions, etc. because they are very easy to clean.

The bench radiator has the same technical properties – except height, length, hub distance, and heat output – of the column radiators.

Special features:

- Horizontal arrangement of elements
- Practical additional function in the form of a seat or storage surface
- A classic and timeless design
- Top in quality and comfort
- A uniquely large variety of models
- Powerful and comfortable
- High accident safety (compliant with statutory accident insurance)
- Safe and easy to install in accordance with VDI 6036

TENDER SPECIFICATIONS

Arbonia bench radiators

4–6 columns of steel; individual elements (height 45 mm) as a welded assembly group, consisting of head pieces (band steel pressings) and round precision steel pipes. Blocks welded together from elements up to the maximum height of the delivery unit. Ready to install with 4 threaded plugs for flow and return as well as for air vent and drain. Edges rounded on all sides with R_{min} = 2 mm.

Coating according to DIN 55900 part 1 and part 2.

Design features comply with the basic principles for the testing of the health and safety of radiators (statutory accident insurance).

Compressive strength and watertightness tested.

Heat output tested and registered in accordance with EN 442.

CE-compliant.

Suitable for closed water heating systems in accordance with DIN 18380 and water quality in accordance with VDI 2035, ÖNORM H5195 and SWKI BT 102-01.

Maximum permissible operating temperature: 110 °C

Max. operating pressure:

4–6 columns 10 bar / 1000 kPa

Packed safely for transport.

RANGE AVAILABLE

- 3 depths: 145–225 mm (4–6 columns)
- 4 radiator heights: 180–315 mm
- Height with bracket (adjustable, without bench): 565–710 mm
- 6 lengths: 1200–3000 mm
- 2-pipe connections
- Brackets ZB0032 included in the range available – see chapter “Fixings”.

The radiators are delivered as combined elements. Plugs and reductions with internal thread are included in the scope of delivery

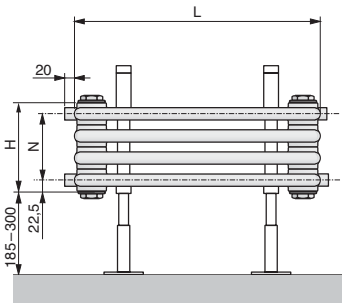
2-PIPE CONNECTIONS WITHOUT BUILT-IN VALVE

Connection system	Ordering code |5|	Position ordering code |6|	Connection size	Ordering code |7| Flow	Ordering code |7| Return	Surcharge per radiator [EUR]
2-pipe, on side	2	L 12 · L 34 · L 14 · L 32	G ⅜" G ½" G ¾"	38 12 34 10	38 12 34 10	–
2-pipe, from bottom, from top	2	L 68 · L 86	G ⅜" G ½" G ¾" G 1"			–
Special connections – design according to drawing |5| = 99						On request

L: recommended position for air vent connection;

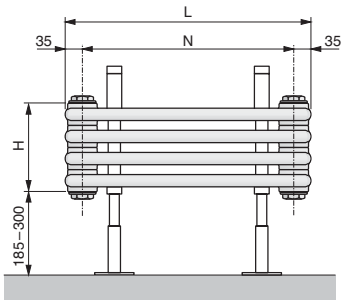
● 100 % dense cut-off wheel;

2-pipe, on side



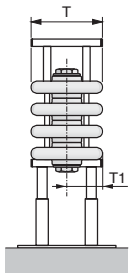
Quantity [el.]	N [mm]
4	135
5	180
6	225
7	270

2-pipe, from bottom



L [mm]	N [mm]
1200	1130
1500	1430
1800	1730
2000	1930
2500	2430
3000	2930

Side view



Quantity [columns]	T [mm]	T1 [mm]
4	145	72.5
5	185	92.5
6	225	112.5

H: height
L: length
T: depth
T1: ½ x depth
N: hub distance

AIR VENT AND DRAIN

Similar to column radiator

TECHNICAL DATA AND PRICE PER RADIATOR – DEPTH 145 MM

Depth T	Length L	Height H		Heat output EN 442				Exponent n	Total weight M	Area A	Water content W	Standard water flow rate q_{ms}	Radiation component s	Price
				Φ ΔT 60 K 90/70/20 °C	**$Φ_s$ ΔT 50 K 75/65/20 °C**	Φ ΔT 42 K 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C							
[mm]	[mm]	[mm]	Type	[watt]	**[watt]**	[watt]	[watt]	[ ]	[kg]	[m^2]	[l]	[kg/h]	[%]	[EUR]
145	1200	180	4F4120	937	**745**	598	380	1.30	14.40	1.50	8.50	50.4	33	941.25
		225	5F4120	1124	**894**	717	457	1.30	18.00	1.90	10.70	63.0	33	1016.08
		270	6F4120	1313	**1044**	837	533	1.30	21.50	2.30	12.80	75.6	33	1090.86
		315	7F4120	1517	**1206**	967	616	1.30	25.10	2.70	14.90	88.2	33	1165.65
	1500	180	4F4150	1176	**935**	750	478	1.30	17.80	1.90	10.40	62.0	33	1045.32
		225	5F4150	1411	**1122**	900	573	1.30	22.20	2.40	13.00	77.5	33	1146.18
		270	6F4150	1698	**1350**	1083	689	1.30	26.60	2.90	15.60	93.0	33	1246.96
		315	7F4150	1904	**1514**	1214	773	1.30	31.10	3.40	18.20	108.5	33	1347.82
	1800	180	4F4180	1405	**1117**	896	570	1.30	21.20	2.30	12.30	73.6	33	1126.65
		225	5F4180	1688	**1342**	1076	685	1.30	26.50	2.90	15.40	92.0	33	1247.83
		270	6F4180	1971	**1567**	1257	800	1.30	31.80	3.40	18.50	110.4	33	1369.01
		315	7F4180	2275	**1809**	1451	924	1.30	37.10	4.00	21.60	128.8	33	1490.09
	2000	180	4F4200	1561	**1241**	995	634	1.30	23.50	2.60	13.60	81.6	33	1178.61
		225	5F4200	1835	**1459**	1170	745	1.30	29.40	3.20	17.00	102.0	33	1312.80
		270	6F4200	2188	**1740**	1396	889	1.30	35.20	3.80	20.40	122.4	33	1446.86
		315	7F4200	2525	**2008**	1610	1026	1.30	41.10	4.50	23.80	142.8	33	1581.01
	2500	180	4F4250	1944	**1546**	1240	790	1.30	29.20	3.20	16.80	101.6	33	1424.04
		225	5F4250	2333	**1855**	1488	947	1.30	36.50	4.00	21.00	127.0	33	1591.57
		270	6F4250	2726	**2168**	1739	1107	1.30	43.70	4.70	25.10	152.4	33	1759.01
		315	7F4250	3148	**2503**	2007	1278	1.30	51.00	5.50	29.30	177.8	33	1926.54
	3000	180	4F4300	2359	**1876**	1505	958	1.30	34.90	3.80	20.00	120.4	33	1565.83
		225	5F4300	2833	**2253**	1807	1151	1.30	43.60	4.80	25.00	150.5	33	1768.80
		270	6F4300	3309	**2631**	2110	1344	1.30	52.30	5.70	29.90	180.6	33	1971.73
		315	7F4300	3821	**3038**	2437	1552	1.30	61.00	6.70	34.90	210.7	33	2174.63

For individual calculations of heat output see “General Information”

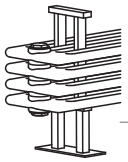
TECHNICAL DATA AND PRICE PER RADIATOR – DEPTH 185 MM

Depth T	Length L	Height H		Heat output EN 442				Expo-nent n	Total weight M	Area A	Water content W	Standard water flow rate q_{ms}	Radiation compo-nent s	Price
				Φ ΔT 60 K 90/70/20 °C	**Φ_s ΔT 50 K 75/65/20 °C**	Φ ΔT 42 K 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C							
[mm]	[mm]	[mm]	Type	[watt]	**[watt]**	[watt]	[watt]	[ ]	[kg]	[m²]	[l]	[kg/h]	[%]	[EUR]
185	1200	180	4F5120	1132	900	722	460	1.30	18.00	1.90	10.60	61.6	30	1013.73
		225	5F5120	1357	1079	865	551	1.30	22.50	2.40	13.30	77.0	30	1106.61
		270	6F5120	1576	1253	1005	640	1.30	27.00	2.90	15.90	92.4	30	1199.57
		315	7F5120	1827	1453	1165	742	1.30	31.50	3.40	18.60	107.8	30	1292.49
	1500	180	4F5150	1432	1139	914	582	1.30	22.30	2.40	13.00	74.0	30	1141.39
		225	5F5150	1719	1367	1096	698	1.30	27.90	3.00	16.20	92.5	30	1266.28
		270	6F5150	1996	1587	1273	811	1.30	33.40	3.60	19.40	111.0	30	1391.09
		315	7F5150	2314	1840	1476	940	1.30	39.00	4.20	22.70	129.5	30	1515.93
	1800	180	4F5180	1696	1349	1082	689	1.30	26.60	2.90	15.40	88.0	30	1236.00
		225	5F5180	2035	1618	1298	826	1.30	33.20	3.60	19.20	110.0	30	1384.45
		270	6F5180	2363	1879	1507	960	1.30	39.80	4.30	23.00	132.0	30	1532.94
		315	7F5180	2742	2180	1748	1113	1.30	46.50	5.00	26.90	154.0	30	1681.41
	2000	180	4F5200	1876	1492	1197	762	1.30	29.40	3.20	17.00	97.2	30	1298.83
		225	5F5200	2207	1755	1408	896	1.30	36.80	4.00	21.20	121.5	30	1463.05
		270	6F5200	2614	2079	1667	1062	1.30	44.10	4.80	25.40	145.8	30	1627.26
		315	7F5200	3035	2413	1935	1232	1.30	51.50	5.60	29.70	170.1	30	1791.42
	2500	180	4F5250	2325	1849	1483	944	1.30	36.50	4.00	20.90	119.2	30	1573.51
		225	5F5250	2793	2221	1781	1134	1.30	45.70	5.00	26.20	149.0	30	1778.38
		270	6F5250	3242	2578	2068	1317	1.30	54.80	5.90	31.40	178.8	30	1983.25
		315	7F5250	3759	2989	2397	1527	1.30	63.90	6.90	36.60	208.6	30	2188.07
	3000	180	4F5300	2779	2210	1772	1129	1.30	43.60	4.80	24.90	141.2	30	1729.41
		225	5F5300	3340	2656	2130	1357	1.30	54.60	6.00	31.20	176.5	30	1973.18
		270	6F5300	3875	3081	2471	1574	1.30	65.50	7.10	37.40	211.8	30	2217.03
		315	7F5300	4497	3576	2868	1826	1.30	76.40	8.30	43.60	247.1	30	2460.89

For individual calculations of heat output see “General Information”

TECHNICAL DATA AND PRICE PER RADIATOR – DEPTH 225 MM

Depth T	Length L	Height H		Heat output EN 442				Exponent n	Total weight M	Area A	Water content W	Standard water flow rate q_{ms}	Radiation component s	Price
				Φ ΔT 60 K 90/70/20 °C	**$Φ_S$ ΔT 50 K 75/65/20 °C**	Φ ΔT 42 K 70/55/20 °C	Φ ΔT 30 K 55/45/20 °C							
[mm]	[mm]	[mm]	Type	[watt]	**[watt]**	[watt]	[watt]	[ ]	[kg]	[m²]	[l]	[kg/h]	[%]	[EUR]
225	1200	180	4F6120	1352	1075	862	549	1.30	21.70	2.30	12.70	72.0	27	1075.05
		225	5F6120	1608	1279	1026	653	1.30	27.10	2.90	15.90	90.0	27	1183.29
		270	6F6120	1876	1492	1197	762	1.30	32.50	3.50	19.00	108.0	27	1291.59
		315	7F6120	2157	1715	1375	876	1.30	37.90	4.10	22.20	126.0	27	1399.80
	1500	180	4F6150	1705	1356	1088	693	1.30	26.80	2.90	15.50	86.0	27	1236.87
		225	5F6150	2030	1614	1294	824	1.30	33.50	3.60	19.40	107.5	27	1385.55
		270	6F6150	2368	1883	1510	962	1.30	40.20	4.30	23.30	129.0	27	1534.27
		315	7F6150	2721	2164	1736	1105	1.30	46.90	5.00	27.20	150.5	27	1682.95
	1800	180	4F6180	2027	1612	1293	823	1.30	31.90	3.40	18.40	102.0	27	1347.42
		225	5F6180	2413	1919	1539	980	1.30	39.90	4.30	23.00	127.5	27	1523.72
		270	6F6180	2814	2238	1795	1143	1.30	47.90	5.20	27.60	153.0	27	1700.05
		315	7F6180	3234	2572	2063	1314	1.30	55.90	6.00	32.20	178.5	27	1876.32
	2000	180	4F6200	2236	1778	1426	908	1.30	35.40	3.80	20.30	113.6	27	1419.75
		225	5F6200	2661	2116	1697	1081	1.30	44.20	4.80	25.40	142.0	27	1614.15
		270	6F6200	3105	2469	1980	1261	1.30	53.00	5.70	30.50	170.4	27	1808.56
		315	7F6200	3569	2838	2276	1449	1.30	61.90	6.70	35.60	198.8	27	2003.01
	2500	180	4F6250	2812	2236	1793	1142	1.30	43.90	4.80	25.10	138.8	27	1729.41
		225	5F6250	3345	2660	2133	1359	1.30	54.90	6.00	31.40	173.5	27	1973.18
		270	6F6250	3904	3104	2490	1585	1.30	65.80	7.10	37.60	208.2	27	2217.03
		315	7F6250	4487	3568	2862	1822	1.30	76.80	8.30	43.90	242.9	27	2460.89
	3000	180	4F6300	3373	2682	2151	1370	1.30	52.40	5.70	29.80	165.2	27	1920.33
		225	5F6300	4015	3193	2561	1631	1.30	65.60	7.20	37.30	206.5	27	2211.91
		270	6F6300	4684	3725	2988	1902	1.30	78.70	8.60	44.80	247.8	27	2503.53
		315	7F6300	5382	4280	3433	2186	1.30	91.80	10.00	52.20	289.1	27	2795.08



For individual calculations of heat output see “General Information”

ARBONIA COLUMN RADIATORS:
ARBONIA INDIVIDUAL

In the following section, you will find:

- Special constructions
- Radiation shields made of glass and sheet metal
- Multi-section radiators
- On request
- Surface finishes



Standard column radiator, Cambiotherm, and Sano radiator:

- The limbs must be coupled together on site.
- A complete delivery is only possible in consultation with the factory.
- Please enclose a drawing with dimensions or template with your order
- Radiator must be suitable for transport

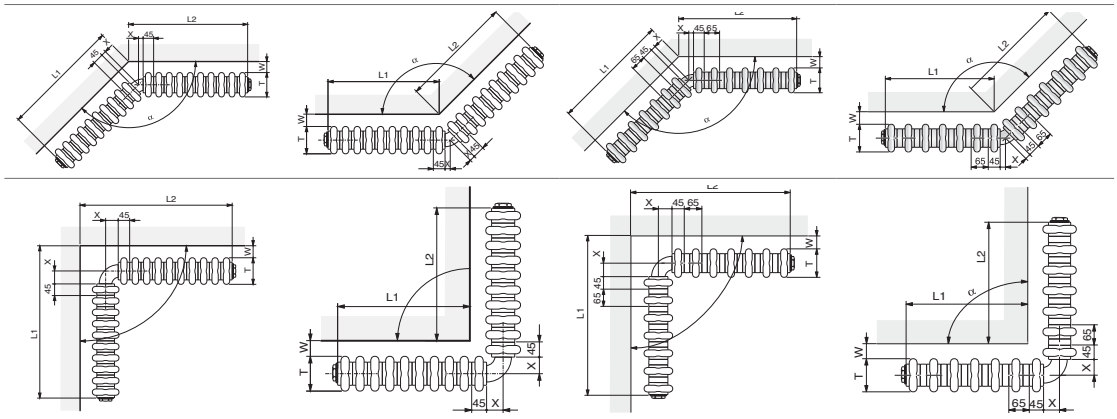
Standard column radiator and Cambiotherm:

- Minimum length: 12 elements
- The outer 3 elements cannot be bent in each case
- Please provide a drawing with dimensions or template with your order
- Radiator must be suitable for transport

Standard column radiator and Sano radiator:

- Arrangement of the floor-ceiling support as with FU
- On customer request, different arrangement also possible
- Adjustment to the room height with special height of the column radiator
- Welded on at the factory, cannot be installed subsequently

ANGLED DESIGN

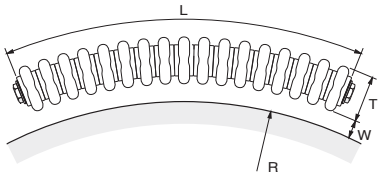
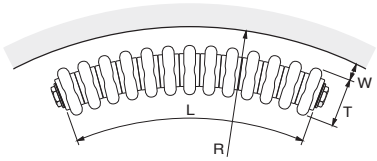
Dimensional drawings	Ordering code	Surcharge per radiator
	|20|	[EUR]
Standard column radiator, Cambiotherm **Sano radiator** 	71	on request

L1, L2: length of the limbs, measured on the wall
α: angle
W: wall spacing
X: portion of axis length
T: depth

Portion of the axis length of the connecting piece per limb depending on the depth and the angle α

Number of columns	Depth T [mm]	Proportional axis length X [mm]					
		α = 90° / 270°	**α = 105° / 195°**	**α = 120° / 210°**	**α = 135° / 225°**	**α = 150° / 240°**	**α = 165° / 255°**
2 columns	65	34	27	21	16	11	7
3 columns	105	49	37	27	18	12	6
4 columns	145	69	52	38	27	17	8
5 columns	185	89	67	50	35	22	11
6 columns	225	109	83	61	43	28	13

CURVED DESIGN

Dimensional drawings	Ordering code |20|	Surcharge per radiator [EUR]
 Inside radius  Outside radius	70	On request

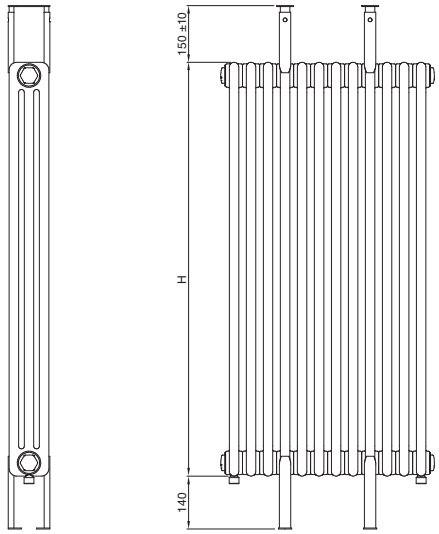
W: wall spacing
R: bending radius (inside radius / outside radius)
T: depth
L: length

Minimum bending radius R_{min}

depending on the depth (number of columns)

Number of columns	Depth T [mm]	R_{min} [mm]
2 columns	65	400
3 columns	105	650
4 columns	145	750
5 columns	185	900
6 columns	225	1000

ROOM DIVIDER INSTALLATION

Dimensional drawing	Ordering code |16|	Surcharge per fixing axis [EUR]
	RT	100.78

H: height

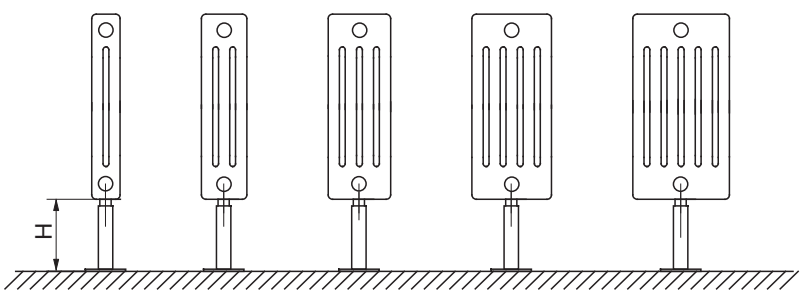
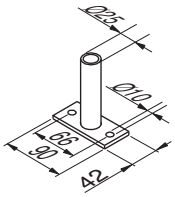
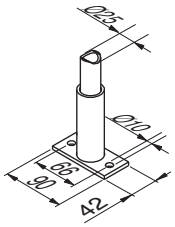
Standard column radiator, Cambiotherm, and Sano radiator:

- Welded in the factory
- Standard height H: 150 mm fix or 150–210 mm variable for finished floors
- Minimum number of feet see table below
- **Requirement class 1 and 2:**
  - As of a height of over 600 mm, a bracket ZB0257/ZB0258 is required in the upper section of the radiator (one bracket per foot)
- **Requirement class 3** (e.g. schools):
  - One bracket ZB0257/ZB0258 is to be used (one bracket per foot)
- On customer request, different arrangement also possible
- In case of version with round pipe feet, the maximum possible extension range is 40 % of H without loss of stability
- The required foot height for installation on unfinished floor is 300 mm. Available on request.

Standard column radiator and Cambiotherm:

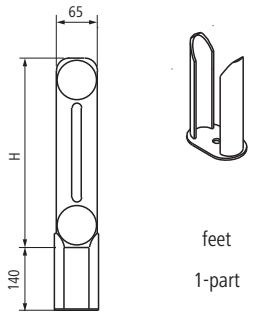
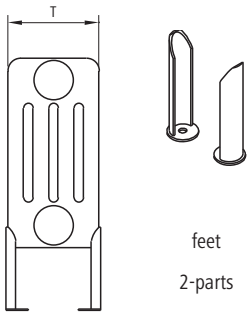
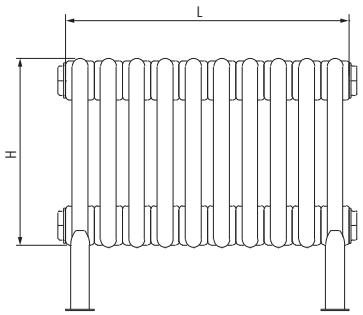
- Welded on at the factory (for 2 columns 1-part feet, for 3–6 columns 2-part feet), cannot be installed subsequently
- Height of the feet: 140 mm
- **Requirement class 1 and 2:**
  - As of a height of over 600 mm, a bracket ZB0257 is required in the upper section of the radiator (one bracket per foot)
- **Requirement class 3** (e.g. schools):
  - One bracket ZB0257 is to be used (one bracket per foot)
- Extension of the outer rounding of the element
- Not height-adjustable
- In addition to the FU standard feet, additional variants are available – design on request

FIXING WITH ROUND PIPE FEET

Dimensional drawings	Type of feet	Height foot [mm]	Ordering code |16|	Surcharge per foot [EUR]
2-6 columns 	 Fixed	150	RF	110.26
	 Adjustable	150–210	RV	147.66

H: Height of round pipe foot

FIXING WITH WELDED FEET

Dimensional drawings	Height foot [mm]	Ordering code |16|	Surcharge per foot [EUR]
2 columns:  feet 1-part 3–6 columns:  feet 2-parts Positions of the feet with side connections: 	140	FU	68.89

H: height
L: length
T: depth

Minimum number of feet

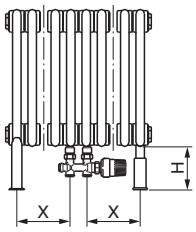
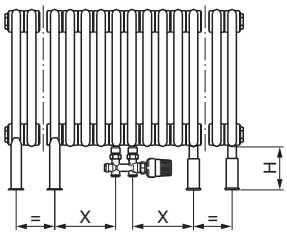
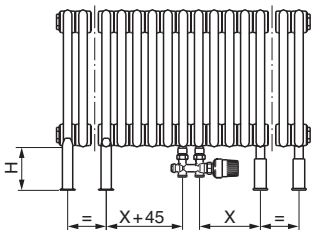
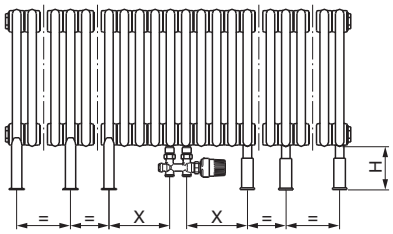
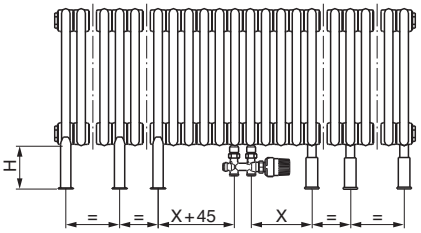
depending on the version and its length in elements

Height	Length [el.]	2 columns feet [pc.]	3 columns feet [pc.]	4 columns feet [pc.]	5 columns feet [pc.]	6 columns feet [pc.]
>190–750	up to 25	2	2	2	2	2
	26–45	3	3	3	4	4
	46–65	4	4	4	5	5
	66–85	5	5	5	–	–
>900–2000	up to 25	2	2	2	3	3
	26–45	3	3	3	4	–
>2200–3000	up to 25	2	2	2	3	(up to 20) 3

Please request the exact position of the welded feet in case of floor built-ins in the installation area of the radiator.
Please note the composition of the floor and carefully select the appropriate fixing variants, including dowels and screws.
Attention: Fixing with welded feet!! Note restricted installation space in case of downward connections.

ARRANGEMENT AND NUMBER OF FEET

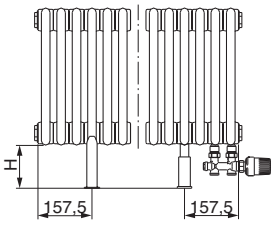
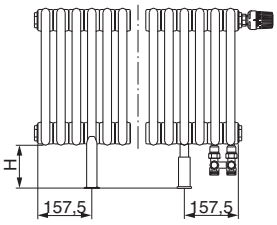
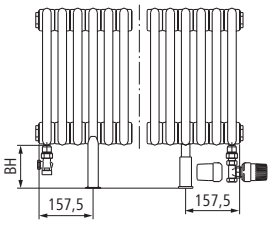
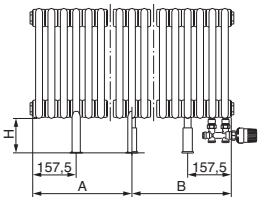
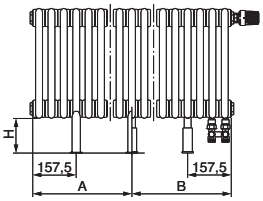
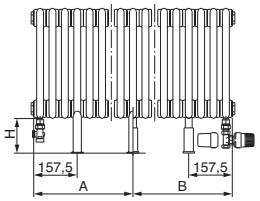
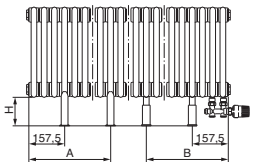
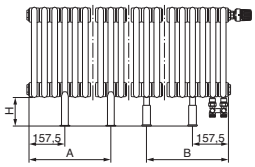
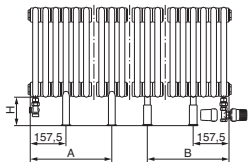
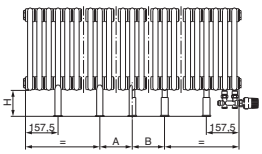
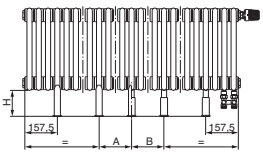
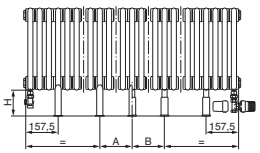
(depending on the number of elements)

Ordering code	Number of elements	
|6|	even	odd
Connection without built-in valve: 2-pipe: 96 / 98 Connection with built-in valve: 2-pipe: 96 / 98 (without figure)	Front view  Dimension X: ≥ 3 free elements depending on the length of the radiator	
Connection without built-in valve: 2-pipe: 96 / 98 Connection with built-in valve: 2-pipe: 96 / 98 (without figure)	Front view 	Front view 
	Dimension X: ≥ 3 free elements depending on the length of the radiator	
Connection without built-in valve: 2-pipe: 96 / 98 Connection with built-in valve: 2-pipe: 96 / 98 (without figure)	Front view 	Front view 
	Dimension X: ≥ 3 free elements depending on the length of the radiator	

Dimension X equal to distance feet to sleeve

POSITION OF FEET / FRONT VIEW

depending on the connections

	2-pipe connection from below		
	Connection without built-in valve: 69 / 89	Connection with built-in valve: 69 / 89	Connection without built-in valve: 68 / 86
With 2 feet	 Image shows connection 89	 Image shows connection 89	 Image shows connection 86
With 3 feet	 Image shows connection 89	 Image shows connection 89	 Image shows connection 86
	With uneven number of elements: • H: height of feet • Dimension A = number of elements / 2 • Dimension B = number of elements / 2		With even number of elements: • H: height of feet • Dimension A = number of elements / 2–22.5 mm • Dimension B = number of elements / 2 + 22.5 mm
With 4 feet	 Image shows connection 89	 Image shows connection 89	 Image shows connection 86
	With uneven number of elements: • H: height of feet • Dimension A = number of elements / 3 • Dimension B = number of elements / 3		With even number of elements: • H: height of feet • Dimension A = number of elements / 2–22.5 mm • Dimension B = number of elements / 2 + 22.5 mm
With 5 feet	 Image shows connection 89	 Image shows connection 89	 Image shows connection 86
	With uneven number of elements: • H: height of feet • Dimension A = (number of elements / 6 x 45) ± 45 • Dimension B = (number of elements / 6 x 45) ± 45		With even number of elements: • H: height of feet • Dimension A = number of elements / 6–22.5 mm • Dimension B = number of elements / 6 + 22.5 mm

COLUMN RADIATOR WITH BENCH BRACKET ZB0226

As a bench, this standard column radiator and the Cambiotherm combines in a harmonious manner the advantages of column radiators, such as cosy heat dissipation, easy cleaning, and accident prevention (compliant with statutory accident insurance), with a practical, useful function as a seat or as a surface for temporary or permanent storage.

Column radiators up to and including a height of 350 mm can be installed as bench using ZB0226 brackets.

FIXING

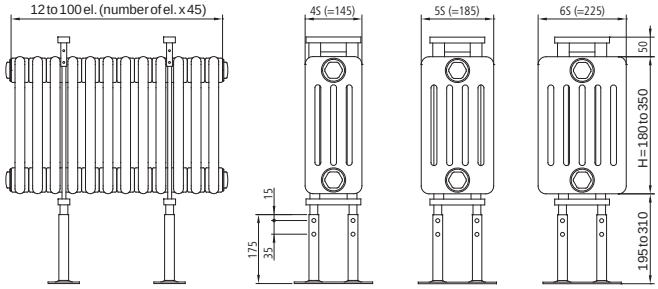
- The fixing complies with the requirement classes 1, 2, and 3 of the guideline VDI 6036.
- On the construction site, the floor building material has to be checked for sufficient loading capacity.

Range available

- 3 depths: 145–225 mm (4–6 columns)
- 4 radiator heights: 180–350 mm
- Height with bracket (adjustable, without bench): 425–710 mm
- Lengths: 540–4500 mm
- 2-pipe connections
- Brackets ZB0226 are not included in range available

The radiators are delivered as combined elements. Plugs and reductions with internal thread, fittings and seals are included in the scope of delivery.

Dimensional drawings

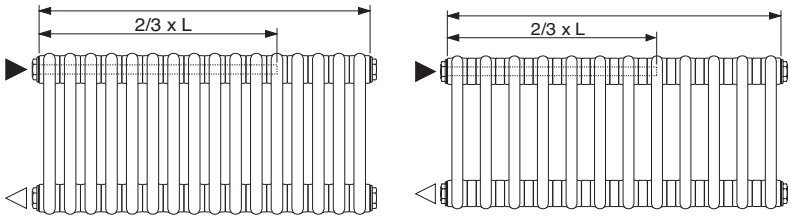


GL: element
H: height

Height [mm]	Number of brackets (AK 1 and 2) Length from [el.]	Length to [el.]	Number of brackets [pc.]	Number of brackets (AK 3) Length from [el.]	Length to [el.]	Number of brackets [pc.]
180–350	12	25	2	12	25	2
	26	45	3	26	45	4
	46	65	4	46	65	6
	66	100	5	66	85	7
				86	100	8

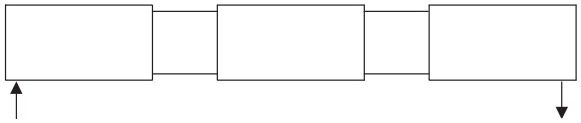
Weight of the bench support was not taken into account
Max. loading capacity of the bracket 500 kg (static).

AVAILABLE ON REQUEST

<table>
<tr><th>Description</th><th></th><th>Feature</th><th>Ordering code</th><th>Surcharge per radiator [EUR]</th></tr>
<tr><td>Pressure version</td><td>High-pressure version
16 bar (1600 kPa)</td><td>|14|</td><td>16</td><td>355.96</td></tr>
<tr><td>Insert pipe</td><td>Insert pipe installed at factory for 10 bar pressure version.
Need for an insert pipe
For column radiators
<table>
<tr><th rowspan="2">Number of columns</th><th colspan="2">Insert pipe required from length</th></tr>
<tr><th>[el.]</th><th>[mm]</th></tr>
<tr><td>2 columns</td><td>85</td><td>3825</td></tr>
<tr><td>3 columns</td><td>83</td><td>3735</td></tr>
<tr><td>4 columns</td><td>80</td><td>3600</td></tr>
<tr><td>5 columns</td><td>70</td><td>3150</td></tr>
<tr><td>6 columns</td><td>60</td><td>2700</td></tr>
</table>
Sano radiator
<table>
<tr><th rowspan="2">Number of columns</th><th colspan="2">Insert pipe required from length</th></tr>
<tr><th>[el.]</th><th>[mm]</th></tr>
<tr><td>2 columns</td><td>60</td><td>3880</td></tr>
<tr><td>3 columns</td><td>58</td><td>3750</td></tr>
<tr><td>4 columns</td><td>56</td><td>3620</td></tr>
<tr><td>5 columns</td><td>49</td><td>3165</td></tr>
<tr><td>6 columns</td><td>42</td><td>2710</td></tr>
</table>
From the lengths given in the table, an insert pipe is fitted at the factory on column radiators with connections on same end. The insert pipe is fitted at ⅔ of the length to ensure correct water circulation
 
</td><td>–</td><td>–</td><td>–</td></tr>
<tr><td></td><td>Insert pipe on request</td><td>|15|</td><td>99</td><td>On request</td></tr>
<tr><td>Individual elements</td><td>For column radiators and Cambiotherm</td><td>|20|</td><td>99</td><td>On request</td></tr>
<tr><td>Heights</td><td>Height over 3000 mm
• For column radiators</td><td colspan="2">On request</td><td>On request</td></tr>
<tr><td>Special versions</td><td>Special height</td><td>|20|</td><td>SBH</td><td>Next standard height + 25 %</td></tr>
<tr><td></td><td>Version according to drawing</td><td>|20|</td><td>99</td><td>On request</td></tr>
</table>

COUPLED COLUMN RADIATORS

- Radiators are delivered as single units
- Connections must be installed on site
- Recommended connection size between the radiators: G ¾" or one size larger than flow/return

Connection system	Description	Sequence of coupled radiators (enter into "Special characteristics" column) First radiator 1	Centre radiator 2	End radiator 3	Ordering code |5|	Surcharge per radiator [EUR]
Connection on same side	• Max. 3 radiators • Maximum length: – for heights 180–600 mm: L_{max} = 12 m – for heights 750–1000 mm: L_{max} = 6.5 m – for heights over 1200 mm: L_{max} = 2.5 m • Please enclose a drawing with your order				75	103.40
Connection on alternating sides	• Length and number theoretically unlimited • Note transport and weight limitations • Please enclose a drawing with your order				76	–
Connection on alternating sides, from below	• Length and number theoretically unlimited • Note transport and weight limitations • Please enclose a drawing with your order				99	–

NIPPLED COLUMN RADIATORS

Description	Feature	Ordering code	Surcharge per radiator [EUR]
Installation [1]			
Nippled on site	|19|	BG	–
Nippled in the factory	|19|	WG	On request

1) Column radiators in the high-pressure version cannot be coupled (delivery in one piece)

Fitting instructions

Instructions on fitting

For reasons of weight and transport, column radiators can only be shipped from the factory as a single piece up to a maximum length. If the maximum length is exceeded in one piece, the column radiators will be delivered in several blocks. These blocks must be nippled on site.

Assembling of column radiators

Column radiators are assembled from radiator elements. The hubs of the individual radiator elements and the nipples are in size G 1¼" right- or left-hand thread. Inside of the fitting two opposed cams are arranged for the proper fit of the coupling tool while assembling.

Careful attention to the following instructions is a prerequisite for a reliable sealing of the fitting connections:

- Place the radiator elements horizontally on a flat plane or two bars
- Thoroughly clean end surfaces of the elements from rust, paint, and dirt
- Use only the nipples and seals provided by Arbonia
- Screw nipples a half thread turn in both centres of a block; note right or left-hand thread; left-hand thread is marked with notches
- Place one sealing on each nipple
- Press next radiator element against it
- Check insert depth outside the radiator and mark it on the mandrel
- Insert the mandrel up to the nipple of the section point
- Tighten the radiator elements by alternating turns of the nipples with the mandrel. Irregular screwing-in leads to leaks. For tightening the nipples, only use a mandrel with a rotary pole with a length of 600–800 mm.
  The tightening torque is 320–400 Nm.
  Using a ring spanner with a length of 800 mm, this torque is achieved when tightening it forcefully (400–500 N at the wrench end).

Connections

Column radiators are closed with blanking plugs at the last elements and are joined to the pipe system by connecting plugs. Blanking and connecting plugs are delivered as required with right- or left-hand thread, the flow-connecting plug should generally have a right-hand thread.

Careful attention to the following instructions is a prerequisite for a reliable sealing of the blanking and connection plugs:

- Use only the blanking and connecting plugs and sealings provided by Arbonia.
- Thoroughly clean the end surfaces of the radiators and sealing faces of the plugs from rust, paint, and dirt.
- Check sealing surface and threads for flawless quality.
- Use one sealing for each plug.
- Screw in the plugs by hand; note right- or left-hand thread. Before applying the plug collar, adjust the sealing radially to make sure, that the complete cross-section is effected and the sealing is not distorted while final tightening the plug.
- Protect finished plugs with spanner insert hexagon ZT0026 0001 and tighten with ring or open-end spanner WF46 of 600 mm. The tightening torque is at least 250–300 Nm.
  When a spanner of 600 mm length is used, this tightening torque is attained by tightening strongly (400–500 N at the spanner end). The use of pipe wrenches and similar tools is not allowed.

Note

In case of facilities probably operated with purified water, the plugs should be tightened up at the earliest two hours later because of the settlement of the sealing material.

Flow and return cannot be swapped in case of column radiators for on-site fitting with centred connection.

SURFACE FINISHES

Description	Finish Ordering code |17|	Colour Ordering code |18/0|	Colour code Ordering code |18|	Surcharge per radiator [EUR]
All Finish in white				
Traffic white RAL 9016	AF	RAL	9016	–
Primed	GRD	–	–	On request
Colour Finish in standard colour [1]	CF	RAL colour	Colour code from colour chart	25 %
	CF	Sanitary colour [2]	–	
	CF	NCS colours [3]	Manufacturer's colour code	
	CF	NIC	Colour code from colour table	
Super Finish, finished in colour of choice [1] [4] **(small volume)** [5]	SF	Manufacturer's colour	Manufacturer's colour code	**+ 25 %** + **Surcharge for small volumes On request** [5]
	SF	Arbonia special colour [2]	–	
Clear lacquer	TF	–	–	25 %
Textured paint after priming				
Traffic white RAL 9016	SL	RAL	9016	25 %
In colour of choice (manufacturer's colour) [1] [4]	KL	Manufacturer's colour	Manufacturer's colour code	**On request**
In colour of choice (Arbonia special colour) [1] [4]	KL	Arbonia special colour [2]	–	
Anti-corrosion coating				
Traffic white RAL 9016	WF	RAL	9016	+40 %
Finished in standard colour	BF	RAL colour	Colour code from colour chart	60 %
	BF	Sanitary colour [2]	–	
	BF	NCS colours [3]	Manufacturer's colour code	
	BF	NIC	Colour code from colour table	
Finished in colour of choice **(small volume)** [5]	FF	Manufacturer's colour	Manufacturer's colour code	**+ 60 %** + **Surcharge for small volumes On request** [5]
	FF	Arbonia special colour [2]	–	
Hot-dip galvanised, outside, for wet areas				
With textured paint in traffic white RAL 9016	ZL	RAL	9016	On request
With textured paint in colour of choice (manufacturer's colour) [1] [4]	ZK	Manufacturer's colour	Manufacturer's colour code	
With textured paint in colour of choice (sanitary colour) [1] [4]	ZK	Sanitary colour [2]	–	
With textured paint in colour of choice (Arbonia special colour) [1] [4]	ZK	Arbonia special colour [2]	–	

[1] For information on ordering, see ordering process

[2] For information on ordering, see ordering process and colour chart

[3] Selected NCS colours as per colour table

[4] Not all colours possible

[5] **Definition of surcharge according to booklet "General Information – Colour fashion of the Arbonia radiators"**

ARBONIA COLUMN RADIATORS:
FIXING AND DIMENSIONAL DRAWINGS

In the following section, you will find:

- Possible combinations – fixings according to VDI 6036
- Without suspension lugs
- With suspension lugs

POSSIBLE COMBINATIONS – FIXINGS ACCORDING TO VDI 6036

VDI 6036

Quick mounting bracket

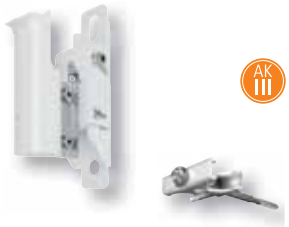
Wall bracket for column radiator

Clamping bracket, fixed spacer

Clamping bracket, variable spacer

Clamping bracket, fixed holder

Clamping bracket, variable holder



Wall bracket, short with clamp holder and spacer

Wall bracket, variable with clamp holder and spacer

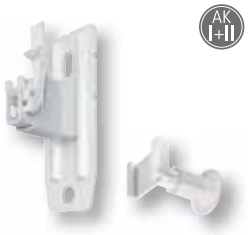
Wall bracket, short with clamp holder and holder

Wall bracket, variable with clamp holder and holder

Built into wall bracket with dehinging safety device with clamp holder/spacer

Suspension lugs wall bracket, short spacer

Suspension lugs wall bracket, variable spacer



Suspension lugs wall bracket, short with shift restraint wall bracket, short

Suspension lugs wall bracket, variable with shift restraint wall bracket, variable

Soil stand bracket with carrier set

Lifting bracket with holder

Requirement classes I and II

Requirement class III

FIXING WITH BUILT-INTO-WALL BRACKETS AND SPACER

Minimum number of fixing brackets and spacers depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2.

Special features:

- **For standard column radiators and Cambiotherm**
- The number of fixing brackets must not be less than the minimum.
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D.
  For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Please note the composition of the wall and carefully choose the appropriate fixing versions, including dowels and screws. Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

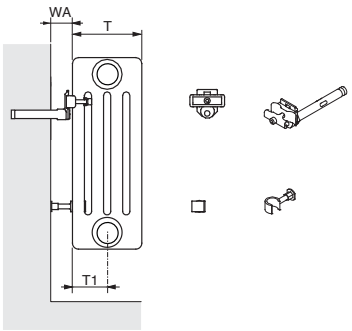


Fig. ZB0278

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	
3 columns	105	52.5	
4 columns	145	72.5	< 60
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements		Item and number of items: Built-into-wall bracket ZB0278	Clamp holder ZB0281	Safety device ZB0279	Spacer ZB0280 0001 ZB0280 0002
2 columns						
300–2200	6–34	*	2 x	2 x	2 x	2 x
	35–50		3 x	3 x	3 x	3 x
	51–60		4 x	4 x	4 x	4 x
>2200–3000	6–30	*	2 x	2 x	2 x	2 x
3 & 4 columns						
300–350	6–22		2 x	2 x	2 x	2 x
	23–38		3 x	3 x	3 x	3 x
	39–52		4 x	4 x	4 x	4 x
	53–60		5 x	5 x	5 x	5 x
>350–900	6–28	*	2 x	2 x	2 x	2 x
	29–52		3 x	3 x	3 x	3 x
	53–60		4 x	4 x	4 x	4 x
>900–2200	6–14		2 x	2 x	2 x	2 x
	15–22		3 x	3 x	3 x	3 x
	23–32		4 x	4 x	4 x	4 x
	33–40		5 x	5 x	5 x	5 x
	41–48		6 x	6 x	6 x	6 x
	49–58		7 x	7 x	7 x	7 x
	59–60		8 x	8 x	8 x	8 x
>2200–3000	6–14		2 x	2 x	2 x	2 x
	15–22		3 x	3 x	3 x	3 x
	23–32		4 x	4 x	4 x	4 x
5 & 6 columns						
300–350	6–18		3 x	3 x	3 x	3 x
	19–24		4 x	4 x	4 x	4 x
	25–30		5 x	5 x	5 x	5 x
	31–36		6 x	6 x	6 x	6 x
	37–42		7 x	7 x	7 x	7 x
	43–50		8 x	8 x	8 x	8 x
>350–900	6–10		2 x	2 x	2 x	2 x
	11–22		3 x	3 x	3 x	3 x
	23–30		4 x	4 x	4 x	4 x
	31–36		5 x	5 x	5 x	5 x
	37–44		6 x	6 x	6 x	6 x
	45–52		7 x	7 x	7 x	7 x
	53–60		8 x	8 x	8 x	8 x
>900–1500	6–12		2 x	2 x	2 x	2 x
	13–20		3 x	3 x	3 x	3 x
	21–26		4 x	4 x	4 x	4 x
	27–34		5 x	5 x	5 x	5 x
	35–40		6 x	6 x	6 x	6 x
	41–48		7 x	7 x	7 x	7 x
	49–54		8 x	8 x	8 x	8 x
>1500–3000	6–8		2 x	2 x	2 x	2 x
	9–12		3 x	3 x	3 x	3 x
	13–16		4 x	4 x	4 x	4 x
	17–22		5 x	5 x	5 x	5 x
	23–26		6 x	6 x	6 x	6 x
	27–20		7 x	7 x	7 x	7 x

* To avoid bending and distortion, use an additional bracket (ZB0257) for a length of 22 elements or more if necessary.

BUILT-INTO-WALL BRACKETS

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Built-into-wall bracket **ZB0278 0005– ZB0278 0008**		• Expansion plug with double wedge, parallel spread, Ø 18 mm • Height adjustable. Height adjustment range = 9 mm	L = 95 mm	–	**ZB0278 0005**	3.48
			L = 130 mm	–	**ZB0278 0006**	3.48
			L = 160 mm	–	**ZB0278 0007**	3.48
			L = 200 mm	–	**ZB0278 0008**	3.48
Safety clip **ZB0279 0002**		• For built-into-wall bracket Ø 18 mm ZB0278 • Material: – White plastic		AF	**ZB0279 0002**	0.75
Clamp holder **ZB0281**		• Clamp holder for wall and built-into-wall bracket, for screwing on column radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0281 0001**	5.15
				CF	**ZB0281** [1]	6.44
				SF	**ZB0281** [1]	6.44
Complete spacer **ZB0280 0001– ZB0280 0002**		• Infinitely adjustable depth • Material/surface: – White plastic	WA = 25–60 mm	–	**ZB0280 0001**	2.39
		• Infinitely adjustable depth • Material/surface: – Grey plastic	WA = 25–60 mm	–	**ZB0280 0002**	2.39
Spacer extension **ZB0294 0001**		• For spacer ZB0280 • Comprising: – 2 extension pieces • Material: – Aluminium	L = 35 mm	–	**ZB0294 0001**	6.76
Bracket **ZB0257**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH BUILT-INTO-WALL BRACKETS AND SPACER

Minimum number of fixing brackets and spacers depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2.

Special features:

- **For Sano radiators**
- **The number of fixing brackets must not be less than the minimum**
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For Sano radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Determination of the number of fixing points tested on a wall made from the currently customary vertically perforated bricks and gypsum plaster according to the recommended connection situations of VDI 6036, Appendix D.
  For the definition of VDI 6036, Appendix D, please refer to "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.
- **Note:**
  – The built-into-wall bracket can only be used in conjunction with the suitable clamp holder.

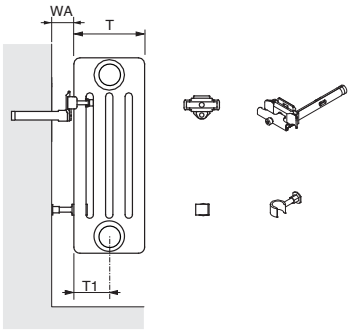


Fig. ZB0278

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	
3 columns	105	52.5	
4 columns	145	72.5	< 60
5 columns	185	92.5	
6 columns	225	112.5	

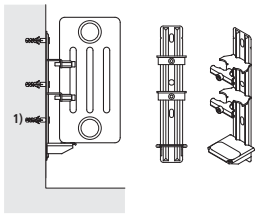
Height [mm]	Length Elements	Item and number of items: Built-into-wall bracket ZB0278	Clamp holder ZB0305	Safety device ZB0279	Spacer ZB0280 0001 ZB0280 0002
2 columns					
300–1100	6–32 *	2 x	2 x	2 x	2 x
	33–48	3 x	3 x	3 x	3 x
	49–60	4 x	4 x	4 x	4 x
>1100–2200	6–24	2 x	2 x	2 x	2 x
	25–38	3 x	3 x	3 x	3 x
	39–50	4 x	4 x	4 x	4 x
	51–60	5 x	5 x	5 x	5 x
>2200–3000	6–24 *	2 x	2 x	2 x	2 x
	25–30	3 x	3 x	3 x	3 x
3 & 4 columns					
300–450	6–22	2 x	2 x	2 x	2 x
	21–40	3 x	3 x	3 x	3 x
	41–58	4 x	4 x	4 x	4 x
	59–60	5 x	5 x	5 x	5 x
>450–1100	6–24	2 x	2 x	2 x	2 x
	25–40	3 x	3 x	3 x	3 x
	41–56	4 x	4 x	4 x	4 x
	57–60	5 x	5 x	5 x	5 x
>1100–2200	6–12	2 x	2 x	2 x	2 x
	13–20	3 x	3 x	3 x	3 x
	21–28	4 x	4 x	4 x	4 x
	29–38	5 x	5 x	5 x	5 x
	39–44	6 x	6 x	6 x	6 x
	45–52	7 x	7 x	7 x	7 x
	53–60	8 x	8 x	8 x	8 x
>2200–3000	6–12	2 x	2 x	2 x	2 x
	13–20	3 x	3 x	3 x	3 x
	21–28	4 x	4 x	4 x	4 x
	29–30	5 x	5 x	5 x	5 x
5 & 6 columns					
300–450	6–14	3 x	3 x	3 x	3 x
	15–20	4 x	4 x	4 x	4 x
	21–26	5 x	5 x	5 x	5 x
	27–30	6 x	6 x	6 x	6 x
	31–36	7 x	7 x	7 x	7 x
	37–40	8 x	8 x	8 x	8 x
	41–46	9 x	9 x	9 x	9 x
	47–52	10 x	10 x	10 x	10 x
	53–56	11 x	11 x	11 x	11 x
	57–60	12 x	12 x	12 x	12 x
>450–1500	6–8	2 x	2 x	2 x	2 x
	9–18	3 x	3 x	3 x	3 x
	19–26	4 x	4 x	4 x	4 x
	27–34	5 x	5 x	5 x	5 x
	35–40	6 x	6 x	6 x	6 x
	41–46	7 x	7 x	7 x	7 x
	47–52	8 x	8 x	8 x	8 x
	53–60	9 x	9 x	9 x	9 x
>1500–3000	6–8	2 x	2 x	2 x	2 x
	9–12	3 x	3 x	3 x	3 x
	13–16	4 x	4 x	4 x	4 x
	17–20	5 x	5 x	5 x	5 x
	21–24	6 x	6 x	6 x	6 x
	25–28	7 x	7 x	7 x	7 x
	29–30	8 x	8 x	8 x	8 x

BUILT-INTO-WALL BRACKET

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Built-into-wall bracket **ZB0278 0005– ZB0278 0008**		• Expansion plug with double wedge, parallel spread, Ø 18 mm • Height adjustable. Height adjustment range = 9 mm	L = 95 mm	ZN	**ZB0278 0005**	3.48
			L = 130 mm	ZN	**ZB0278 0006**	3.48
			L = 160 mm	ZN	**ZB0278 0007**	3.48
			L = 200 mm	ZN	**ZB0278 0008**	3.48
Safety clip **ZB0279 0002**		• For built-into-wall bracket Ø 18 mm ZB0278 • Material: – White plastic		AF	**ZB0279 0002**	0.75
Clamp holder **ZB0305**		• Clamp holder for wall and built-into-wall bracket, for screwing on Sano radiators • Not suitable for wall bracket ZB0005 • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	80 x 25 mm	AF	**ZB0305 0001**	6.96
				CF	**ZB0305** [1]	8.70
				SF	**ZB0305** [1]	8.70
Complete spacer **ZB0280 0001– ZB0280 0002**		• Infinitely adjustable depth • Material/surface: – White plastic	WA = 25–60 mm	–	**ZB0280 0001**	2.39
		• Infinitely adjustable depth • Material/surface: – Grey plastic	WA = 25–60 mm	-	**ZB0280 0002**	2.39
Spacer extension **ZB0294 0001**		• For spacer ZB0280 • Comprising: – 2 extension pieces • Material: – Aluminium	L = 35 mm	-	**ZB0294 0001**	6.76

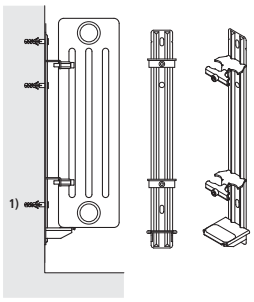
1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH QUICK MOUNTING BRACKET



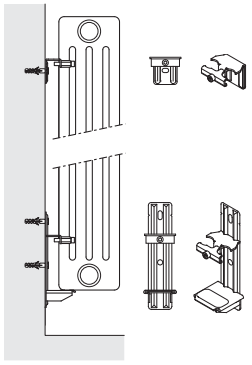
Quick mounting bracket set, short
ZB0233

Quick mounting bracket, short
ZB0234



Quick mounting bracket set, long
ZB0235

Quick mounting bracket, long
ZB0236



Quick mounting bracket set, 2 parts
ZB0237

Quick mounting bracket, 2 parts
ZB0238

Special features:

- **For standard column radiators**
- The number of fixing brackets must not be less than the minimum
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Safety bolt (1) optional, not included in the scope of delivery. If required, the screw and dowel set ZK0071 0001 can be ordered separately.

Minimum number of quick mounting brackets depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2.

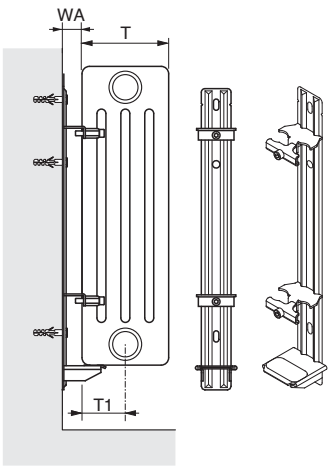


Fig. ZB0235

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	
3 columns	105	52.5	
4 columns	145	72.5	30
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Quick mounting bracket short ZB0234	Quick mounting bracket long ZB0236	Quick mounting bracket 2-part ZB0238
2–4 columns				
300–495	6–34 *	2 x		
	35–50	3 x		
	51–60	4 x		
>495–695	6–34 *		2 x	
	35–50		3 x	
	51–60		4 x	
>695–2200	6–34 *			2 x
	35–50			3 x
	51–60			4 x
>2200–3000	6–30 *			2 x
5–6 columns				
300–450	6–16	2 x		
	17–36	3 x		
	37–48	4 x		
	49–60	5 x		
>450–495	6–30 *	2 x		
	31–46	3 x		
	47–60	4 x		
>495–695	6–30 *		2 x	
	31–46		3 x	
	47 – 60		4 x	
>695–1500	6–30 *			2 x
	31–46			3 x
	47–60			4 x
>1500–3000	6–22			2 x
	23–30			3 x

* To avoid bending and distortion, use an additional bracket (ZB0257) for a length of 22 elements or more if necessary.

Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".

Wall-building material needs to be tested on site for sufficient loading capacity.

Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Quick mounting bracket set short **ZB0233**		• For standard column radiators • WA = 30 mm • comprising: – 2 brackets – Screws and dowels • Surface: – Finished in |AF|	Height of the radiator 300–495 mm	AF	**ZB0233 0001**	25.59
Quick mounting bracket short **ZB0234**		• For standard column radiators • WA = 30 mm • Comprising: – 1 bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	Height of the radiator 300–495 mm	AF CF SF	**ZB0234 0001** **ZB0234** [1)] **ZB0234** [1)]	12.81 16.01 16.01
Quick mounting bracket set long **ZB0235**		• For standard column radiators • WA = 30 mm • Comprising: – 2 brackets – Screws and dowels • Surface: – Finished in |AF|	Height of the radiator 500–695 mm	AF	**ZB0235 0001**	25.59
Quick mounting bracket long **ZB0236**		• For standard column radiators • WA = 30 mm • Comprising: – 1 bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	Height of the radiator 500–695 mm	AF CF SF	**ZB0236 0001** **ZB0236** [1)] **ZB0236** [1)]	12.81 16.01 16.01
Quick mounting bracket set 2-part **ZB0237**		• For standard column radiators • WA = 30 mm • Comprising: – 2 brackets – Screws and dowels • Surface: – Finished in |AF|	Height of the radiator 700–3000 mm	AF	**ZB0237 0001**	25.59
Quick mounting bracket 2-part **ZB0238**		• For standard column radiators • WA = 30 mm • Comprising: – 1 bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	Height of the radiator 700–3000 mm	AF CF SF	**ZB0238 0001** **ZB0238** [1)] **ZB0238** [1)]	12.81 16.01 16.01
Back holder, fixed **ZB0239**		• WA = 30 mm • Surface: – Finished in |AF|, |CF|, |SF|	Height of the radiator 700–3000 mm	AF CF SF	**ZB0239 0001** **ZB0239** [1)] **ZB0239** [1)]	10.53 13.16 13.16
Screw and dowel set **ZK0071 0001**		• Comprising: – 12 screws (width across flats 13 mm, length 90 mm) – 12 dowels (drill hole Ø 10 mm, length 80 mm) – 12 washers • Surface: – Galvanised |ZN|	–	–	**ZK0071 0001**	4.45
Bracket **ZB0257**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm L = 160 mm	AF CF SF AF CF SF	**ZB0257 0001** **ZB0257** [1)] **ZB0257** [1)] **ZB0257 0002** **ZB0257** [1)] **ZB0257** [1)]	6.62 8.28 8.28 6.62 8.28 8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH QUICK MOUNTING BRACKET

Minimum number of quick mounting brackets depending on the model and its length in elements according to VDI 6036 – requirement class 3 (e.g. schools).

Special features:

- **For standard column radiators**
- The number of fixing brackets must not be less than the minimum
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system. Safety bolt (1) optional, not included in the scope of delivery. If required, the screw and dowel set ZK0071 0001 can be ordered separately.

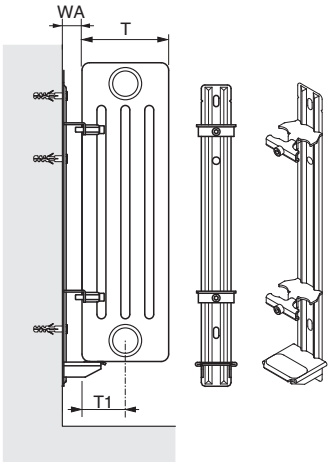


Fig. ZB0235

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	30
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Quick mounting bracket short ZB0234	Quick mounting bracket long ZB0236	Quick mounting bracket 2-part ZB0238
2–4 columns				
300–450	6–18	2 x		
	19–28	3 x		
	29–38	4 x		
	39–48	5 x		
	49–56	6 x		
	57–60	7 x		
>450–495	6–26 *	2 x		
	27–42	3 x		
	43–52	4 x		
	53–60	5 x		
>495–695	6–26 *		2 x	
	27–42		3 x	
	43–52		4 x	
	53–60		5 x	
>695–2200	6–26 *			2 x
	27–42			3 x
	43–52			4 x
	53–60			5 x
>2200–3000	6–26 *			2 x
	27–30			3 x
5–6 columns				
300–450	6–14	2 x		
	15–22	3 x		
	23–30	4 x		
	31–36	5 x		
	37–44	6 x		
	45–52	7 x		
	53–60	8 x		
>450–495	6–24	2 x		
	25–42	3 x		
	43–50	4 x		
	51–60	5 x		
>495–695	6–24		2 x	
	25–42		3 x	
	43–50		4 x	
	51–60		5 x	
>695–1500	6–24			2 x
	25–42			3 x
	43–50			4 x
	51–60			5 x
>1500–3000	6–20			2 x
	21–30			3 x

* To avoid bending and distortion, use an additional bracket (ZB0257) for a length of 22 elements or more if necessary.

Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see “General information – VDI 6036”.

Wall-building material needs to be tested on site for sufficient loading capacity.

Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Quick mounting bracket set short **ZB0233**		• For standard column radiators • WA = 30 mm • Comprising: – 2 brackets – Screws and dowels • Surface: – Finished in |AF|	Height of the radiator 300–495 mm	AF	**ZB0233 0001**	25.59
Quick mounting bracket short **ZB0234**		• For standard column radiators • WA = 30 mm • Comprising: – 1 bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	Height of the radiator 300–495 mm	AF CF SF	**ZB0234 0001** **ZB0234** [1)] **ZB0234** [1)]	12.81 16.01 16.01
Quick mounting bracket set long **ZB0235**		• For standard column radiators • WA = 30 mm • Comprising: – 2 brackets – Screws and dowels • Surface: – Finished in |AF|	Height of the radiator 500–695 mm	AF	**ZB0235 0001**	25.59
Quick mounting bracket long **ZB0236**		• For standard column radiators • WA = 30 mm • Comprising: – 1 bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	Height of the radiator 500–695 mm	AF CF SF	**ZB0236 0001** **ZB0236** [1)] **ZB0236** [1)]	12.81 16.01 16.01
Quick mounting bracket set 2-part **ZB0237**		• For standard column radiators • WA = 30 mm • Comprising: – 2 brackets – Screws and dowels • Surface: – Finished in |AF|	Height of the radiator 700–3000 mm	AF	**ZB0237 0001**	25.59
Quick mounting bracket 2-part **ZB0238**		• For standard column radiators • WA = 30 mm • Comprising: – 1 bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	Height of the radiator 700–3000 mm	AF CF SF	**ZB0238 0001** **ZB0238** [1)] **ZB0238** [1)]	12.81 16.01 16.01
Back holder, fixed **ZB0239**		• WA = 30 mm • Surface: – Finished in |AF|, |CF|, |SF|	Height of the radiator 700–3000 mm	AF CF SF	**ZB0239 0001** **ZB0239** [1)] **ZB0239** [1)]	10.53 13.16 13.16
Screw and dowel set **ZK0071 0001**		• Comprising: – 12 screws (width across flats 13 mm, length 90 mm) – 12 dowels (drill hole Ø 10 mm, length 80 mm) – 12 washers • Surface: – Galvanised |ZN|	–	–	**ZK0071 0001**	4.45
Bracket **ZB0257**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm L = 160 mm	AF CF SF AF CF SF	**ZB0257 0001** **ZB0257** [1)] **ZB0257** [1)] **ZB0257 0002** **ZB0257** [1)] **ZB0257** [1)]	6.62 8.28 8.28 6.62 8.28 8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets
depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2.

Special features:

- **For standard column radiators and Sano radiators**
- The number of fixing brackets must not be less than the minimum
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- For Sano radiators, the holder ZB0258 needs to be ordered separately
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

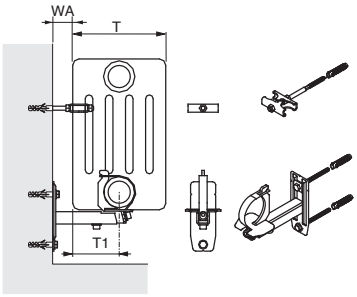


Fig. ZB0245

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	30–40
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Suitable wall bracket set	Holder for standard column radiators ZB0257	Holder for Sano radiators ZB0258
2 columns				
190–260** >300–550	6–28 *	1x ZB0247	Included in scope of delivery of the wall bracket	The holder ZB0258 must be ordered separately
	29–42	3x ZB0244		
	43–52	2x ZB0247		
	53–60	5x ZB0244		
>550–1500	6–24	1x ZB0247		
	25–38	3x ZB0244		
	39–48	2x ZB0247		
	49–60	5x ZB0244		
>1500–3000	6–18	1x ZB0247		
	19–32	3x ZB0244		
	33–42	2x ZB0247		
	43–54	5x ZB0244		
	55–60	3x ZB0247		
3 & 4 columns				
190–260** >300–550	6–28 *	1x ZB0248	Included in scope of delivery of the wall bracket	The holder ZB0258 must be ordered separately
	29–42	3x ZB0245		
	43–52	2x ZB0248		
	53–60	5x ZB0245		
>550–1500	6–20	1x ZB0248		
	21–36	3x ZB0245		
	37–46	2x ZB0248		
	47–60	5x ZB0245		
>1500–2200	6–14	1x ZB0248		
	15–22	3x ZB0245		
	23–34	2x ZB0248		
	35–42	5x ZB0245		
	43–52	3x ZB0248		
>2200–3000	6–14	1x ZB0248		
	15–22	3x ZB0245		
	23–30	2x ZB0248		
5 & 6 columns				
190–260** >300–550	6–16	3x ZB0246	Included in scope of delivery of the wall bracket	The holder ZB0258 must be ordered separately
	17–20	2x ZB0249		
	21–26	5x ZB0246		
	27–32	3x ZB0249		
>300–550	6–10	1x ZB0249		
	11–26	3x ZB0246		
	27–36	2x ZB0249		
	37–46	5x ZB0246		
	47–54	3x ZB0249		
>550–1000	6– 8	1x ZB0249		
	9–22	3x ZB0246		
	23–30	2x ZB0249		
	31–38	5x ZB0246		
	39–46	3x ZB0249		
>1000–1500	6– 8	1x ZB0249		
	9–14	3x ZB0246		
	15–20	2x ZB0249		
	21–26	5x ZB0246		
	27–30	3x ZB0249		

* To avoid bending and distortion, use an additional bracket (ZB0257) for a length of 22 elements or more if necessary.

** Installation without sound insulation pad and brackets included in scope of delivery

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket **ZB0244– ZB0246**		• For column radiators with 2 columns • Infinitely adjustable depth • Comprising: – 1 wall bracket – 1 holder (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0244 0001**	20.58
				CF	**ZB0244** [1]	25.73
				SF	**ZB0244** [1]	25.73
		• For column radiators with 3 to 4 columns • Infinitely adjustable depth • Comprising: – 1 wall bracket – 1 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0245 0001**	20.58
				CF	**ZB0245** [1]	25.73
				SF	**ZB0245** [1]	25.73
		• For column radiators with 5 to 6 columns • Infinitely adjustable depth • Comprising: – 1 wall bracket – 1 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0246 0001**	20.58
				CF	**ZB0246** [1]	25.73
				SF	**ZB0246** [1]	25.73
Wall bracket set **ZB0247– ZB0249**		• For column radiators with 2 columns • Infinitely adjustable depth • Comprising: – 2 wall brackets – 2 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0247 0001**	39.72
				CF	**ZB0247** [1]	49.65
				SF	**ZB0247** [1]	49.65
		• For column radiators with 3 to 4 columns • Infinitely adjustable depth • Comprising: – 2 wall brackets – 2 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0248 0001**	39.72
				CF	**ZB0248** [1]	49.65
				SF	**ZB0248** [1]	49.65
		• For column radiators with 5 to 6 columns • Infinitely adjustable depth • Comprising: – 2 wall brackets – 2 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0249 0001**	39.72
				CF	**ZB0249** [1]	49.65
				SF	**ZB0249** [1]	49.65
Bracket **ZB0257, ZB0258**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets
depending on the model and its length in elements according to VDI 6036 – requirement class 3 (e.g. schools).

Special features:

- **For standard column radiators and Sano radiators**
- The number of fixing brackets must not be less than the minimum
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- For Sano radiators, the holder ZB0258 needs to be ordered separately
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

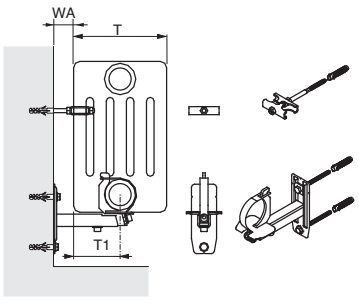


Fig. ZB0245

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	30–40
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Suitable wall bracket set	Holder for standard column radiators ZB0257	Holder for Sano radiators ZB0258
2 columns				
190–260** >300–550	6–26 *	1x ZB0247	Included in scope of delivery of the wall bracket	The holder ZB0258 must be ordered separately
	27–40	3x ZB0244		
	41–52	2x ZB0247		
	53–60	5x ZB0244		
>550–2200	6–16	1x ZB0247		
	17–24	3x ZB0244		
	25–32	2x ZB0247		
	33–40	5x ZB0244		
	41–50	3x ZB0247		
	51–58	7x ZB0244		
	59–60	4x ZB0247		
>2200–3000	6–18	1x ZB0247		
	19–26	3x ZB0244		
	27–30	2x ZB0247		
3 & 4 columns				
190–260**	6–16 *	1x ZB0248	Included in scope of delivery of the wall bracket	The holder ZB0258 must be ordered separately
	27–24	3x ZB0245		
	25–32	2x ZB0248		
	33–42	5x ZB0245		
	43–50	3x ZB0248		
	51–58	7x ZB0245		
	59–60	4x ZB0248		
>300–550	6–20	1x ZB0248		
	21–32	3x ZB0245		
	33–42	2x ZB0248		
	43–54	5x ZB0245		
	55–60	3x ZB0248		
>550–2200	6–16	1x ZB0248		
	17–24	3x ZB0245		
	25–32	2x ZB0248		
	33–40	5x ZB0245		
	41–48	3x ZB0248		
	49–56	7x ZB0245		
	57–60	4x ZB0248		
>2200–2200	6–14	1x ZB0248		
	15–22	3x ZB0245		
	23–30	2x ZB0248		
5 & 6 columns				
180–260**	6–10	1x ZB0249	Included in scope of delivery of the wall bracket	The holder ZB0258 must be ordered separately
	11–16	3x ZB0246		
	17–22	2x ZB0249		
	23–28	5x ZB0246		
	29–34	3x ZB0249		
	35–40	7x ZB0246		
	41–46	4x ZB0249		
>300–550	6–14	1x ZB0249		
	15–20	3x ZB0246		
	21–26	2x ZB0249		
	27–34	5x ZB0246		
	35–40	3x ZB0249		
	41–46	7x ZB0246		
	47–54	4x ZB0249		
>550–1500	6–12	1x ZB0249		
	13–16	3x ZB0246		
	17–22	2x ZB0249		
	23–26	5x ZB0246		
	27–32	3x ZB0249		
	33–38	7x ZB0246		
	39–44	4x ZB0249		

* To avoid bending and distortion, use an additional bracket (ZB0257) for a length of 22 elements or more if necessary.

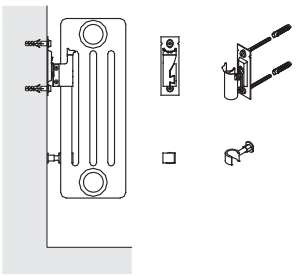
** Installation without sound insulation pad and brackets included in scope of delivery

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket **ZB0244– ZB0246**		• For column radiators with 2 columns • Infinitely adjustable depth • Comprising: – 1 wall bracket – 1 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0244 0001**	20.58
				CF	**ZB0244** [1)]	25.73
				SF	**ZB0244** [1)]	25.73
		• For column radiators with 3 to 4 columns • Infinitely adjustable depth • Comprising: – 1 wall bracket – 1 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0245 0001**	20.58
				CF	**ZB0245** [1)]	25.73
				SF	**ZB0245** [1)]	25.73
		• For column radiators with 5 to 6 columns • Infinitely adjustable depth • Comprising: – 1 wall bracket – 1 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0246 0001**	20.58
				CF	**ZB0246** [1)]	25.73
				SF	**ZB0246** [1)]	25.73
Wall bracket set **ZB0247– ZB0249**		• For column radiators with 2 columns • Infinitely adjustable depth • Comprising: – 2 wall brackets – 2 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0247 0001**	39.72
				CF	**ZB0247** [1)]	49.65
				SF	**ZB0247** [1)]	49.65
		• For column radiators with 3 to 4 columns • Infinitely adjustable depth • Comprising: – 2 wall brackets – 2 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0248 0001**	39.72
				CF	**ZB0248** [1)]	49.65
				SF	**ZB0248** [1)]	49.65
		• For column radiators with 5 to 6 columns • Infinitely adjustable depth • Comprising: – 2 wall brackets – 2 holders (L = 130 mm) – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30–40 mm	AF	**ZB0249 0001**	39.72
				CF	**ZB0249** [1)]	49.65
				SF	**ZB0249** [1)]	49.65
Bracket **ZB0257, ZB0258**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1)]	8.28
				SF	**ZB0257** [1)]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1)]	8.28
				SF	**ZB0257** [1)]	8.28
		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1)]	8.28
				SF	**ZB0258** [1)]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1)]	8.28
				SF	**ZB0258** [1)]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH CLAMPING BRACKET

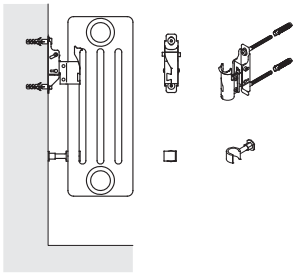


Top:

Clamping bracket, fixed
ZB0251

Bottom:

Complete spacer
ZB0280 0001–ZB0280 0002



Top:

Clamping bracket, variable
ZB0254

Bottom:

Complete spacer
ZB0280 0001–ZB0280 0002

Special features:

- **For standard column radiators and Sano radiators**
- The number of fixing brackets must not be less than the minimum.
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

Minimum number of clamping brackets
depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2.

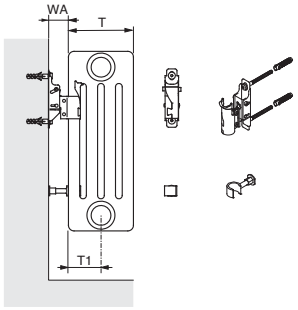


Fig. ZB0254

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	30 35–45 45–60
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length of elements **standard column radiator**	Length of elements **Sano radiator**	Item and number of items: Suitable clamping bracket fixed ZB0251	Suitable clamping bracket variable ZB0254	Complete spacer ZB0280
2–4 columns					
300–1000	6–28 *	6–28 *	2x	2x	2x
	29–42	29–42	3x	3x	3x
	43–52	43–52	4x	4x	4x
	53–60	53–60	5x	5x	5x
>1000–2200	6–18	6–16	2x	2x	2x
	19–30	17–30	3x	3x	3x
	31–48	31–48	4x	4x	4x
	49–60	49–60	5x	5x	5x
>2200–3000	6–18	6–16	2x	2x	2x
	19–30	19–30	3x	3x	3x
5 & 6 columns					
300–550	6–12	6–12	2x	2x	2x
	13–30	13–30	3x	3x	3x
	31–40	31–40	4x	4x	4x
	41–50	41–50	5x	5x	5x
	51–60	51–60	6x	6x	6x
>550–1500	6–20	6–18	2x	2x	2x
	21–30	19–30	3x	3x	3x
	31–40	31–40	4x	4x	4x
	41–50	41–50	5x	5x	5x
	51–60	51–60	6x	6x	6x
>1500–3000	6–10	6–10	2x	2x	2x
	11–18	11–18	3x	3x	3x
	19–24	19–24	4x	4x	4x
	25–30	25–30	5x	5x	5x

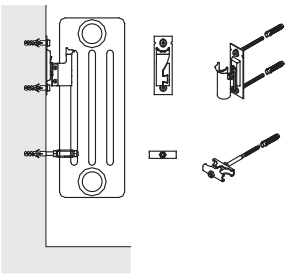
* To avoid bending and distortion, use an additional bracket (ZB0257) for a length of 22 elements or more if necessary.

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Clamping bracket fixed **ZB0251**		• For column radiators and Sano radiators • Comprising: – 1 clamping bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30 mm	AF	**ZB0251 0001**	13.24
				CF	**ZB0251** [1)]	16.55
				SF	**ZB0251** [1)]	16.55
Clamping bracket variable **ZB0254**		• For column radiators and Sano radiators • Comprising: – 1 clamping bracket variable – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 35–45 mm	AF	**ZB0254 0001**	17.41
				CF	**ZB0254** [1)]	21.76
				SF	**ZB0254** [1)]	21.76
			WA = 45–60 mm	AF	**ZB0254 0002**	17.41
				CF	**ZB0254** [1)]	21.76
				SF	**ZB0254** [1)]	21.76
Complete spacer **ZB0280 0001–** **ZB0280 0002**		• Infinitely adjustable depth • Material/surface: – White plastic	WA = 25–60 mm	–	**ZB0280 0001**	2.39
		• Infinitely adjustable depth • Material/surface: – Grey plastic	WA = 25–60 mm	–	**ZB0280 0002**	2.39
Bracket **ZB0257,** **ZB0258**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1)]	8.28
				SF	**ZB0257** [1)]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1)]	8.28
				SF	**ZB0257** [1)]	8.28
		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1)]	8.28
				SF	**ZB0258** [1)]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1)]	8.28
				SF	**ZB0258** [1)]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH CLAMPING BRACKET

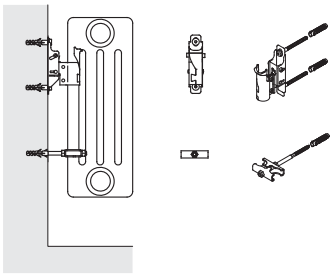


Top:

Clamping bracket, fixed
ZB0251

Bottom:

Holder
ZB0257



Top:

Clamping bracket, variable
ZB0254

Bottom:

Holder
ZB0257

Special features:

- **For standard column radiators**
- **The number of fixing brackets must not be less than the minimum**
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

Minimum number of clamping brackets
depending on the model and its length in elements according to VDI 6036 – requirements class 3 (e.g. schools).

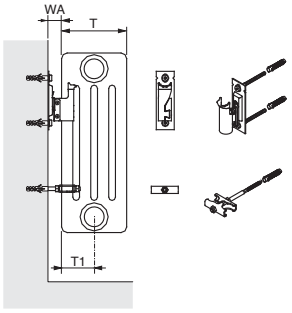


Fig. Clamping bracket ZB0251
Holder ZB0257

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	30 35–45 45–60
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

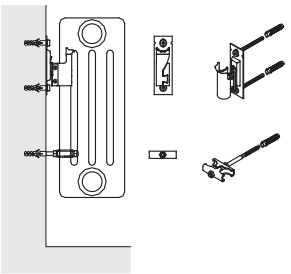
Height [mm]	Length of elements **standard column radiator**	Item and number of items: Suitable clamping bracket fixed ZB0251	Suitable clamping bracket variable ZB0254	Bracket ZB0257
2–4 columns				
300–350	6–20	2x	2x	2x
	21–32	3x	3x	3x
	33–42	4x	4x	4x
	43–52	5x	5x	5x
	53–60	6x	6x	6x
>350–2200	6–22	2x	2x	2x
	23–30	3x	3x	3x
	31–40	4x	4x	4x
	41–50	5x	5x	5x
	51–60	6x	6x	6x
>2200–3000	6–18	2x	2x	2x
	19–30	3x	3x	3x
5 & 6 columns				
300–550	6–14	2x	2x	2x
	15–20	3x	3x	3x
	21–26	4x	4x	4x
	27–34	5x	5x	5x
	35–42	6x	6x	6x
	43–48	7x	7x	7x
	49–54	8x	8x	8x
	55–60	9x	9x	9x
>550 – 1500	6–16	2x	2x	2x
	17–24	3x	3x	3x
	25–34	4x	4x	4x
	35–42	5x	5x	5x
	43–50	6x	6x	6x
	51–60	7x	7x	7x
>1500 – 3000	6–10	2x	2x	2x
	11–18	3x	3x	3x
	19–24	4x	4x	4x
	25–30	5x	5x	5x

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Clamping bracket fixed **ZB0251**		• For column radiators and Sano radiators • Comprising: – 1 clamping bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30 mm	AF	**ZB0251 0001**	13.24
				CF	**ZB0251** [1)]	16.55
				SF	**ZB0251** [1)]	16.55
Clamping bracket variable **ZB0254**		• For column radiators and Sano radiators • Comprising: – 1 clamping bracket variable – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 35–45 mm	AF	**ZB0254 0001**	17.41
				CF	**ZB0254** [1)]	21.76
				SF	**ZB0254** [1)]	21.76
			WA = 45–60 mm	AF	**ZB0254 0002**	17.41
				CF	**ZB0254** [1)]	21.76
				SF	**ZB0254** [1)]	21.76
Bracket **ZB0257**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1)]	8.28
				SF	**ZB0257** [1)]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1)]	8.28
				SF	**ZB0257** [1)]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH CLAMPING BRACKET

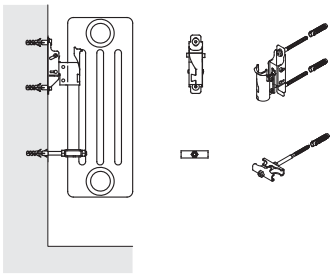


Top:

Clamping bracket, fixed
ZB0251

Bottom:

Holder
ZB0258



Top:

Clamping bracket, variable
ZB0254

Bottom:

Holder
ZB0258

Special features:

- **For Sano radiators**
- **The number of fixing brackets must not be less than the minimum**
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For Sano radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

Minimum number of clamping brackets depending on the model and its length in elements according to VDI 6036 – requirements class 3 (e.g. schools).

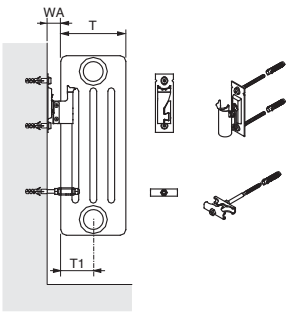


Fig. ZB0251

Height [mm]	Length of elements **Sano radiator**	Item and number of items: Suitable clamping bracket fixed ZB0251	Suitable clamping bracket variable ZB0254	Bracket ZB0258
2 & 4 columns				
300–350	6–16	2x	2x	2x
	17–22	3x	3x	3x
	23–30	4x	4x	4x
	31–38	5x	5x	5x
	39–46	6x	6x	6x
	47–54	7x	7x	7x
	55–60	8x	8x	8x
>350–2200	6–18	2x	2x	2x
	19–26	3x	3x	3x
	27–34	4x	4x	4x
	35–42	5x	5x	5x
	43–52	6x	6x	6x
	53–60	7x	7x	7x
>2200–3000	6–18	2x	2x	2x
	19–26	3x	3x	3x
	27–30	4x	4x	4x
5 & 6 columns				
300–550	6–8	2x	2x	2x
	9–14	3x	3x	3x
	15–20	4x	4x	4x
	21–24	5x	5x	5x
	25–30	6x	6x	6x
	31–34	7x	7x	7x
	35–40	8x	8x	8x
	41–46	9x	9x	9x
	47–50	10x	10x	10x
	51–56	11x	11x	11x
	57–60	12x	12x	12x
>550–1500	6–12	2x	2x	2x
	13–22	3x	3x	3x
	23–28	4x	4x	4x
	29–36	5x	5x	5x
	37–44	6x	6x	6x
	45–52	7x	7x	7x
	53–60	4x	4x	4x
>1500–3000	6–10	2x	2x	2x
	11–16	3x	3x	3x
	17–22	4x	4x	4x
	23–30	5x	5x	5x

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	30 35–45 45–60
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Clamping bracket fixed **ZB0251**		• For column radiators and Sano radiators • Comprising: – 1 clamping bracket – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 30 mm	AF	**ZB0251 0001**	13.24
				CF	**ZB0251** [1)]	16.55
				SF	**ZB0251** [1)]	16.55
Clamping bracket variable **ZB0254**		• For column radiators and Sano radiators • Comprising: – 1 clamping bracket variable – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 35–45 mm	AF	**ZB0254 0001**	17.41
				CF	**ZB0254** [1)]	21.76
				SF	**ZB0254** [1)]	21.76
			WA = 45–60 mm	AF	**ZB0254 0002**	17.41
				CF	**ZB0254** [1)]	21.76
				SF	**ZB0254** [1)]	21.76
Bracket **ZB0258**		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1)]	8.28
				SF	**ZB0258** [1)]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1)]	8.28
				SF	**ZB0258** [1)]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – **requirement class 1 and 2**

Special features:

- **For standard column radiators and Cambio-therm**
- The number of fixing brackets must not be less than the minimum.
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request. The wall bracket can only be used in conjunction with the suitable clamp holder.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

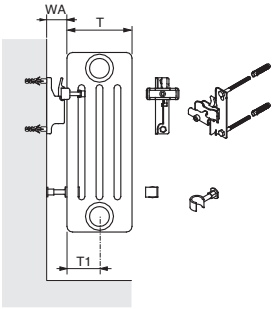


Fig. 1: Wall bracket ZB0282, clamp holder ZB0281 spacer ZB0280

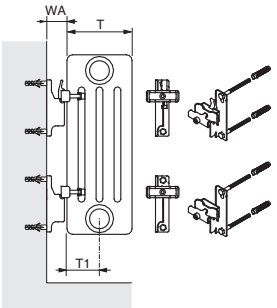


Fig. 2 Wall bracket ZB0282, clamp holder ZB0281 wall bracket ZB0282, clamp holder ZB0281

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	33
3 columns	105	52.5	43
4 columns	145	72.5	53
5 columns	185	92.5	63
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items Fig.1 Suitable wall bracket short ZB0282 top	Fig.1 Clamp holder ZB0281 top	Fig.1 Spacer ZB0280 bottom	Fig.2 Suitable wall bracket short ZB0282 top/bottom
2 columns					
300–1100	6–32 **	2x	2x	2x	4x
	33–48	3x	3x	3x	6x
	49–60	4x	4x	4x	8x
>1100–2200	6–24	2x	2x	2x	4x
	25–38	3x	3x	3x	6x
	39–50	4x	4x	4x	8x
	51–60	5x	5x	5x	10x
>2200–3000	6–24	2x	2x	2x	4x
	25–30	3x	3x	3x	6x
3 & 4 columns					
300–450	6–34 **	2x	2x	2x	4x
	35–50	3x	3x	3x	6x
	51–60	4x	4x	4x	8x
>450–1100	6–26 **	2x	2x	2x	4x
	27–40	3x	3x	3x	6x
	41–50	4x	4x	4x	8x
	51–60	5x	5x	5x	10x
>1100–2200	6–14	2x	2x	2x	4x
	15–24	3x	3x	3x	6x
	25–34	4x	4x	4x	8x
	35–42	5x	5x	5x	10x
	43–50	6x	6x	6x	12x
>2200–3000	6–14	2x	2x	2x	4x
	15–22	3x	3x	3x	6x
	23–30	4x	4x	4x	2x
5 & 6 columns					
300–450	6–18	3x	3x	3x	6x
	19–24	4x	4x	4x	8x
	25–30	5x	5x	5x	10x
	31–36	6x	6x	6x	12x
>450–1100	6–16	2x	2x	2x	4x
	17–32	3x	3x	3x	6x
	33–44	4x	4x	4x	8x
	45–54	5x	5x	5x	10x
	55–60	6x	6x	6x	12x
>1100–1500	6–10	2x	2x	2x	4x
	17–28	3x	3x	3x	6x
	29 – 38	4x	4x	4x	8x
	39–48	5x	5x	5x	10x
	49–60	6x	6x	6x	12x
>1500–3000	6–10	2x	2x	2x	4x
	11–16	3x	3x	3x	6x
	17–22	4x	4x	4x	8x
	23–30	5x	5x	5x	10x

** In order to avoid bending and distortion, use an additional bracket (ZB0257) for a length of 22 elements or more if necessary.

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket short **ZB0282**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 23 mm	AF	**ZB0282 0001**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 33 mm	AF	**ZB0282 0002**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 43 mm	AF	**ZB0282 0003**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 53 mm	AF	**ZB0282 0004**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
Clamp holder **ZB0281**		• Clamp holder for wall and built-into-wall bracket, for screwing on column radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0281 0001**	5.15
				CF	**ZB0281** [1]	6.44
				SF	**ZB0281** [1]	6.44
Complete spacer **ZB0280 0001–** **ZB0280 0002**		• Infinitely adjustable depth • Material/surface: – White plastic	WA = 25–60 mm	–	**ZB0280 0001**	2.39
		• Infinitely adjustable depth • Material/surface: – Grey plastic	WA = 25–60 mm	–	**ZB0280 0002**	2.39
Spacer extension **ZB0294 0001**		• For spacer ZB0280 • Comprising: – 2 extension pieces • Material: – Aluminium	L = 35 mm	–	**ZB0294 0001**	6.76
Bracket **ZB0257, ZB0258**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 3 (e.g. schools)

Special features:

- **For standard column radiators and Cambiotherm**
- The number of fixing brackets must not be less than the minimum.
- For a wall distance > 50 mm, only use in conjunction with dehinging safety device and shift restraint
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

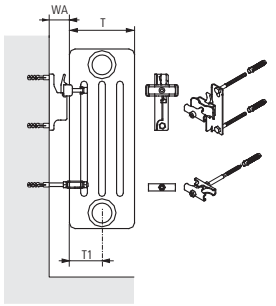


Fig. Wall bracket ZB0282, clamp holder ZB0281 spacer ZB0257

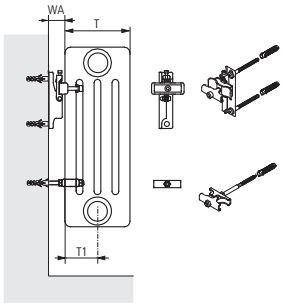


Fig. Wall bracket ZB0282, clamp holder ZB0281, dehinging safety device and shift restraint ZK0020 spacer ZB0257

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	33
3 columns	105	52.5	43
4 columns	145	72.5	53
5 columns	185	92.5	63
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Suitable wall bracket short ZB0282	Clamp holder ZB0281	Bracket ZB0257
2 columns				
300–2200	6–18	2x	2x	2x
	19–26	3x	3x	3x
	27–36	4x	4x	4x
	37–44	5x	5x	5x
	45–52	6x	6x	6x
	53–60	7x	7x	7x
>2200–3000	6–20	2x	2x	2x
	21–30	3x	3x	3x
3 & 4 columns				
300–1100	6–18	2x	2x	2x
	19–26	3x	3x	3x
	27–36	4x	4x	4x
	37–46	5x	5x	5x
	47–54	6x	6x	6x
	55–60	7x	7x	7x
>1100–2200	6–14	2x	2x	2x
	15–22	3x	3x	3x
	23–26	4x	4x	4x
	27–38	5x	5x	5x
	39–44	6x	6x	6x
	45–52	7x	7x	7x
	53–60	8x	8x	8x
>2200–3000	6–14	2x	2x	2x
	15–22	3x	3x	3x
	23–26	4x	4x	4x
	27–30	5x	5x	5x
5 & 6 columns				
300–450	6–12	2x	2x	2x
	13–18	3x	3x	3x
	19–24	4x	4x	4x
	25–30	5x	5x	5x
	31–36	6x	6x	6x
	37–42	7x	7x	7x
	43–50	8x	8x	8x
>450–1500	6–16	2x	2x	2x
	17–22	3x	3x	3x
	23–30	4x	4x	4x
	31–38	5x	5x	5x
	39–46	6x	6x	6x
	47–52	7x	7x	7x
	53–60	8x	8x	8x
>1500–3000	6–10	2x	2x	2x
	11–16	3x	3x	3x
	17–22	4x	4x	4x
	23–30	5x	5x	5x

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket short **ZB0282**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 23 mm	AF	**ZB0282 0001**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 33 mm	AF	**ZB0282 0002**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 43 mm	AF	**ZB0282 0003**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 53 mm	AF	**ZB0282 0004**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
Dehinging safety device and shifting restraint set **ZK0020 0001, ZK0020 0002**		• For ZB0282 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0001**	16.02
		• For ZB0287 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0002**	16.02
Clamp holder **ZB0281**		• Clamp holder for wall and built-into-wall bracket, for screwing on column radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0281 0001**	5.15
				CF	**ZB0281** [1]	6.44
				SF	**ZB0281** [1]	6.44
Bracket **ZB0257**		• Infinitely adjustable depth • Surface: • Finished in |AF|, |CF|, |SF| • For standard column radiators	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2*.

Special features:

- **For standard column radiators and Cambio-therm**
- The number of fixing brackets must not be less than the minimum.
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- The wall bracket can only be used in conjunction with the suitable clamp holder.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

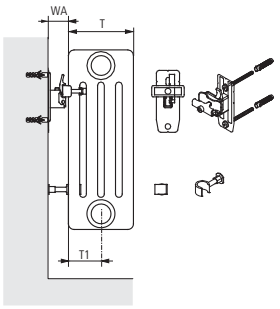


Fig. Wall bracket ZB0287, clamp holder ZB0281 spacer ZB0280

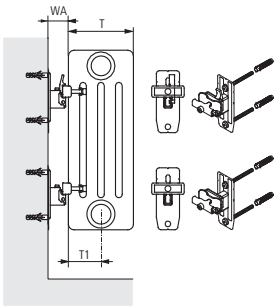


Fig. Wall bracket ZB0287, clamp holder ZB0281 wall bracket ZB0287, clamp holder ZB0281

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	45–55 55–70 70–100
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Fig.1 Suitable wall bracket variable ZB0287 top	Fig.1 Clamp holder ZB0281 top	Fig.1 Spacer ZB0280 bottom	Fig.2 Suitable wall bracket variable ZB0287 top/bottom
2 columns					
300–1100	6–32 **	2x	2x	2x	4x
	33–48	3x	3x	3x	6x
	49–60	4x	4x	4x	8x
>1100–2200	6–24	2x	2x	2x	4x
	25–38	3x	3x	3x	6x
	39–50	4x	4x	4x	8x
	51–60	5x	5x	5x	10x
>2200–3000	6–24	2x	2x	2x	4x
	25–30	3x	3x	3x	6x
3 & 4 columns					
300–450	6–34 **	2x	2x	2x	4x
	35–50	3x	3x	3x	6x
	51–60	4x	4x	4x	8x
>450–1100	6–26 **	2x	2x	2x	4x
	27–40	3x	3x	3x	6x
	41–50	4x	4x	4x	8x
	51–60	5x	5x	5x	10x
>1100–2200	6–14	2x	2x	2x	4x
	15–24	3x	3x	3x	6x
	25–34	4x	4x	4x	8x
	35–42	5x	5x	5x	10x
	43–50	6x	6x	6x	12x
>2200–3000	6–14	2x	2x	2x	4x
	15–22	3x	3x	3x	6x
	23–30	4x	4x	4x	2x
5 & 6 columns					
300–450	6–18	3x	3x	3x	6x
	19–24	4x	4x	4x	8x
	25–30	5x	5x	5x	10x
	31–36	6x	6x	6x	12x
>450 – 1100	6–16	2x	2x	2x	4x
	17–32	3x	3x	3x	6x
	33–44	4x	4x	4x	8x
	45–54	5x	5x	5x	10x
	55–60	6x	6x	6x	12x
>1100–1500	6–10	2x	2x	2x	4x
	17–28	3x	3x	3x	6x
	29–38	4x	4x	4x	8x
	39–48	5x	5x	5x	10x
	49–60	6x	6x	6x	12x
>1500–3000	6–10	2x	2x	2x	4x
	11–16	3x	3x	3x	6x
	17–22	4x	4x	4x	8x
	23–30	5x	5x	5x	10x

* Please request separate allocation for variable wall bracket (ZB0287) with wall distance 60–100 mm.

** In order to avoid bending and distortion, use an additional bracket (ZB0257) for a length of 22 elements or more if necessary.

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket variable **ZB0287**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket variable – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 35–45 mm	AF	**ZB0287 0001**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 45–60 mm	AF	**ZB0287 0002**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 60–100 mm	AF	**ZB0287 0003**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
Clamp holder **ZB0281**		• Clamp holder for wall and built-into-wall bracket, for screwing on column radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0281 0001**	5.15
				CF	**ZB0281** [1]	6.44
				SF	**ZB0281** [1]	6.44
Complete spacer **ZB0280 0001–** **ZB0280 0002**		• Infinitely adjustable depth • Material/surface: – White plastic	WA = 25–60 mm	–	**ZB0280 0001**	2.39
		• Infinitely adjustable depth • Material/surface: – Grey plastic	WA = 25–60 mm	–	**ZB0280 0002**	2.39
Spacer extension **ZB0294 0001**		• For spacer ZB0280 • Comprising: – 2 extension pieces • Material: – Aluminium	L = 35 mm	–	**ZB0294 0001**	6.76
Bracket **ZB0257, ZB0258**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 3 (e.g. schools)*.

Special features:

- **For standard column radiators and Cambiotherm**
- **The number of fixing brackets must not be less than the minimum.**
- For a wall distance > 50 mm, only use in conjunction with dehinging safety device and shift restraint
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For column radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

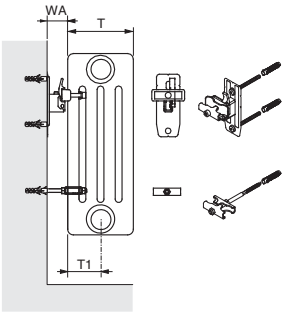


Fig. Wall bracket ZB0287, clamp holder ZB0281 spacer ZB0257

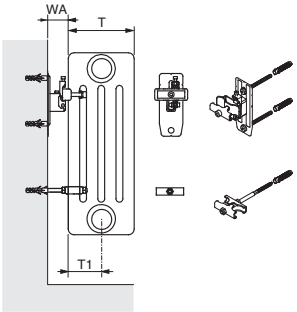


Fig. Wall bracket ZB0287, clamp holder ZB0281, dehinging safety device and shift restraint ZK0020 spacer ZB0257

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	45–55 55–70 70–100
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Suitable variable wall bracket ZB0287 top	Clamp holder ZB0281 top	Bracket ZB0257
2 columns				
300–2200	6–18	2x	2x	2x
	19–26	3x	3x	3x
	27–36	4x	4x	4x
	37–44	5x	5x	5x
	45–52	6x	6x	6x
	53–60	7x	7x	7x
>2200–3000	6–20	2x	2x	2x
	21–30	3x	3x	3x
3 & 4 columns				
300–1100	6–18	2x	2x	2x
	19–26	3x	3x	3x
	27–36	4x	4x	4x
	37–46	5x	5x	5x
	47–54	6x	6x	6x
	55–60	7x	7x	7x
>1100–2200	6–14	2x	2x	2x
	15–22	3x	3x	3x
	23–26	4x	4x	4x
	27–38	5x	5x	5x
	39–44	6x	6x	6x
	45–52	7x	7x	7x
	53–60	8x	8x	8x
>2200–3000	6–14	2x	2x	2x
	15–22	3x	3x	3x
	23–26	4x	4x	4x
	27–30	5x	5x	5x
5 & 6 columns				
300–450	6–12	2x	2x	2x
	13–18	3x	3x	3x
	19–24	4x	4x	4x
	25–30	5x	5x	5x
	31–36	6x	6x	6x
	37–42	7x	7x	7x
	43–50	8x	8x	8x
>450–1500	6–16	2x	2x	2x
	17–22	3x	3x	3x
	23–30	4x	4x	4x
	31–38	5x	5x	5x
	39–46	6x	6x	6x
	47–52	7x	7x	7x
	53–60	8x	8x	8x
>1500–3000	6–10	2x	2x	2x
	11–16	3x	3x	3x
	17–22	4x	4x	4x
	23–30	5x	5x	5x

* Please request separate allocation for variable wall bracket (ZB0287) with wall distance 60–100 mm.

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket variable **ZB0287**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket variable – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 35–45 mm	AF	**ZB0287 0001**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 45–60 mm	AF	**ZB0287 0002**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 60–100 mm	AF	**ZB0287 0003**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
Dehinging safety device and shifting restraint set **ZK0020 0001, ZK0020 0002**		• For ZB0282 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0001**	16.02
		• For ZB0287 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0002**	16.02
Clamp holder **ZB0281**		• Clamp holder for wall and built-into-wall bracket, for screwing on column radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0281 0001**	5.15
				CF	**ZB0281** [1]	6.44
				SF	**ZB0281** [1]	6.44
Bracket **ZB0257**		• Infinitely adjustable depth • Surface: • Finished in |AF|, |CF|, |SF| • For standard column radiators	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2.

Special features:

- **For Sano radiators**
- **The number of fixing brackets must not be less than the minimum.**
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For Sano radiators with a length of less than 6 elements, ask about a suitable fixing system.
- The wall bracket can only be used in conjunction with the suitable clamp holder.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

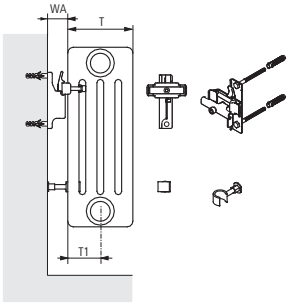


Fig. Wall bracket ZB0282, Sano clamp holder ZB0305 spacer ZB0280

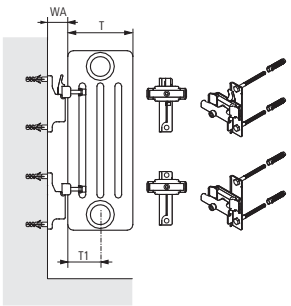


Fig. Wall bracket ZB0282, Sano clamp holder ZB0305 wall bracket ZB0282, Sano clamp holder ZB0305

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	33
3 columns	105	52.5	43
4 columns	145	72.5	53
5 columns	185	92.5	63
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items Fig.1 Suitable wall bracket short ZB0282 top	Fig.1 Sano clamp holder top	Fig.1 Spacer complete ZB0280 bottom	Fig.2 Suitable wall bracket short ZB0282 bottom
2 columns					
300–1100	6–32	2x	2x	2x	2x
	33–48	3x	3x	3x	3x
	49–60	4x	4x	4x	4x
>1100–2200	6–24	2x	2x	2x	2x
	25–38	3x	3x	3x	3x
	39–50	4x	4x	4x	4x
	51–60	5x	5x	5x	5x
>2200–3000	6–24	2x	2x	2x	2x
	25–30	3x	3x	3x	3x
3 & 4 columns					
300–450	6–34	2x	2x	2x	2x
	35–50	3x	3x	3x	3x
	51–60	4x	4x	4x	4x
>450–1100	6–26	2x	2x	2x	2x
	27–40	3x	3x	3x	3x
	41–56	4x	4x	4x	4x
	57–60	5x	5x	5x	5x
>1100–2200	6–14	2x	2x	2x	2x
	15–22	3x	3x	3x	3x
	23–30	4x	4x	4x	4x
	31–38	5x	5x	5x	5x
	39–46	6x	6x	6x	6x
	47–54	7x	7x	7x	7x
	55–60	8x	8x	8x	8x
>2200–3000	6–14	2x	2x	2x	2x
	15–22	3x	3x	3x	3x
	23–30	4x	4x	4x	4x
5 & 6 columns					
300–450	6–18	3x	3x	3x	3x
	19–24	4x	4x	4x	4x
	25–30	5x	5x	5x	5x
	31–36	6x	6x	6x	6x
	37–42	7x	7x	7x	7x
	43–48	8x	8x	8x	8x
	49–54	9x	9x	9x	9x
	55–60	10x	10x	10x	10x
>450–1100	6–16	2x	2x	2x	2x
	17–26	3x	3x	3x	3x
	27–34	4x	4x	4x	4x
	35–42	5x	5x	5x	5x
	43–50	6x	6x	6x	6x
	51–60	7x	7x	7x	7x
>1100–1500	6–16	2x	2x	2x	2x
	17–24	3x	3x	3x	3x
	25–30	4x	4x	4x	4x
	31–36	5x	5x	5x	5x
	37–44	6x	6x	6x	6x
	45–52	7x	7x	7x	7x
	53–58	8x	8x	8x	8x
	59–60	9x	9x	9x	9x
>1500–3000	6–10	2x	2x	2x	2x
	11–16	3x	3x	3x	3x
	17–20	4x	4x	4x	4x
	21–24	5x	5x	5x	5x
	25–30	6x	6x	6x	6x

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket short **ZB0282**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 23 mm	AF	**ZB0282 0001**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 33 mm	AF	**ZB0282 0002**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 43 mm	AF	**ZB0282 0003**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 53 mm	AF	**ZB0282 0004**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
Sano clamp holder **ZB0305**		• Clamp holder for wall and built-into-wall bracket, for screwing on Sano radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0305 0001**	6.96
				CF	**ZB0305** [1]	8.70
				SF	**ZB0305** [1]	8.70
Complete spacer **ZB0280 0001–** **ZB0280 0002**		• Infinitely adjustable depth • Material/surface: – White plastic	WA = 25–60 mm	–	**ZB0280 0001**	2.39
		• Infinitely adjustable depth • Material/surface: – Grey plastic	WA = 25–60 mm	–	**ZB0280 0002**	2.39
Spacer extension **ZB0294 0001**		• For spacer ZB0280 • Comprising: – 2 extension pieces • Material: – Aluminium	L = 35 mm	–	**ZB0294 0001**	6.76

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 3 (e.g. schools).

Special features:

- **For Sano radiators**
- **The number of fixing brackets must not be less than the minimum**
- For a wall distance > 50 mm, only use in conjunction with dehinging safety device and shift restraint
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For Sano radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

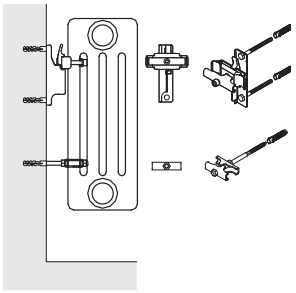


Fig. Wall bracket ZB0282, Sano clamp holder ZB0305, holder ZB0258

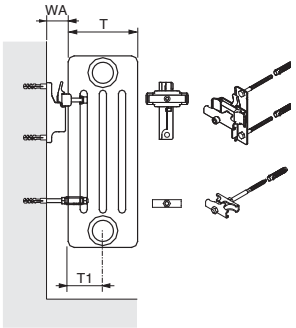


Fig. Wall bracket ZB0282, Sano clamp holder ZB0305, dehinging safety device and shift restraint ZK0020, holder ZB0258

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	45–55 55–70 70–100
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Suitable wall bracket variable ZB0282 top	Sano clamp holder ZB0305 top	Holder ZB0258 bottom
2 columns				
300–750	6–14	2x	2x	2x
	15–20	3x	3x	3x
	21–28	4x	4x	4x
	29–34	5x	5x	5x
	35–40	6x	6x	6x
	41–46	7x	7x	7x
	47–54	8x	8x	8x
	55–60	9x	9x	9x
>750–2200	6–16	2x	2x	2x
	17–22	3x	3x	3x
	23–30	4x	4x	4x
	31–36	5x	5x	5x
	37–42	6x	6x	6x
	43–48	7x	7x	7x
	49–58	8x	8x	8x
	59–60	9x	9x	9x
>2200–3000	6–18	2x	2x	2x
	19–26	3x	3x	3x
	27–30	4x	4x	4x
3 & 4 columns				
300–750	6–16	2x	2x	2x
	17–22	3x	3x	3x
	23–30	4x	4x	4x
	31–36	5x	5x	5x
	37–44	6x	6x	6x
	45–50	7x	7x	7x
	51–58	8x	8x	8x
	59–60	9x	9x	9x
>750–2200	6–12	2x	2x	2x
	13–20	3x	3x	3x
	21–26	4x	4x	4x
	27–32	5x	5x	5x
	33–38	6x	6x	6x
	39–44	7x	7x	7x
	45–52	8x	8x	8x
	53–58	9x	9x	9x
	59–60	10x	10x	10x
>2200–3000	6–12	2x	2x	2x
	13–20	3x	3x	3x
	21–26	4x	4x	4x
	27–30	5x	5x	5x
	39–49	6x	6x	6x
	47–54	7x	7x	7x
	55–60	8x	8x	8x
5 & 6 columns		See page after next		

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket short **ZB0282**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 23 mm	AF	**ZB0282 0001**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 33 mm	AF	**ZB0282 0002**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 43 mm	AF	**ZB0282 0003**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 53 mm	AF	**ZB0282 0004**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
Dehinging safety device and shifting restraint set **ZK0020 0001, ZK0020 0002**		• For ZB0282 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0001**	16.02
		• For ZB0287 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0002**	16.02
Sano clamp holder **ZB0305**		• Clamp holder for wall and built-into-wall bracket, for screwing on Sano radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0305 0001**	6.96
				CF	**ZB0305** [1]	8.70
				SF	**ZB0305** [1]	8.70
Bracket **ZB0258**		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 3 (e.g. schools).

Special features:

- **For Sano radiators**
- **The number of fixing brackets must not be less than the minimum**
- For a wall distance > 50 mm, only use in conjunction with dehinging safety device and shift restraint
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For Sano radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

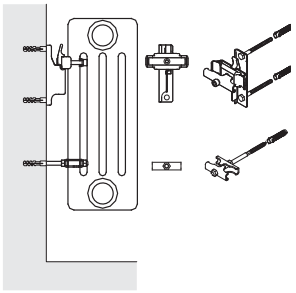


Fig. Wall bracket ZB0282, Sano clamp holder ZB0305 holder ZB0258

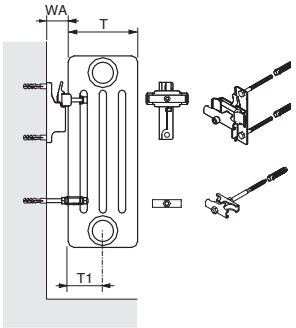


Fig. Wall bracket ZB0282, Sano clamp holder ZB0305, dehinging safety device and shift restraint ZK0020, holder ZB0258

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	45–55 55–70 70–100
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Suitable wall bracket variable ZB0282 top	Sano clamp holder ZB0305 top	Holder ZB0258 bottom
5 & 6 columns				
300–450	6–8	2x	2x	2x
	9–14	3x	3x	3x
	15–18	4x	4x	4x
	19–24	5x	5x	5x
	25–28	6x	6x	6x
	29–32	7x	7x	7x
	33–38	8x	8x	8x
	39–42	9x	9x	9x
	43–46	10x	10x	10x
	47–50	11x	11x	11x
	51–56	12x	12x	12x
>450–1500	6–12	2x	2x	2x
	13–18	3x	3x	3x
	19–22	4x	4x	4x
	23–28	5x	5x	5x
	29–34	6x	6x	6x
	35–38	7x	7x	7x
	39–44	8x	8x	8x
	45–50	9x	9x	9x
	51–54	10x	10x	10x
	55–60	11x	11x	11x
>1500–3000	6–8	2x	2x	2x
	9–14	3x	3x	3x
	15–20	4x	4x	4x
	21–24	5x	5x	5x
	25–28	6x	6x	6x
	29–30	7x	7x	7x

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket short **ZB0282**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 23 mm	AF	**ZB0282 0001**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 33 mm	AF	**ZB0282 0002**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 43 mm	AF	**ZB0282 0003**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
			WA = 53 mm	AF	**ZB0282 0004**	7.36
				CF	**ZB0282** [1]	9.20
				SF	**ZB0282** [1]	9.20
Dehinging safety device and shifting restraint set **ZK0020 0001, ZK0020 0002**		• For ZB0282 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0001**	16.02
		• For ZB0287 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0002**	16.02
Sano clamp holder **ZB0305**		• Clamp holder for wall and built-into-wall bracket, for screwing on Sano radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0305 0001**	6.96
				CF	**ZB0305** [1]	8.70
				SF	**ZB0305** [1]	8.70
Bracket **ZB0258**		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2*.

Special features:

- **For Sano radiators**
- **The number of fixing brackets must not be less than the minimum.**
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For Sano radiators with a length of less than 6 elements, ask about a suitable fixing system.
- The wall bracket can only be used in conjunction with the suitable clamp holder.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

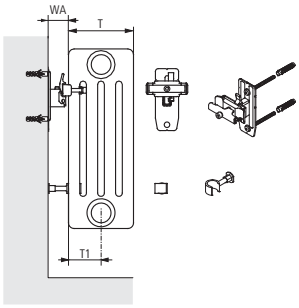


Fig. Wall bracket ZB0287, Sano clamp holder ZB0305 spacer ZB0280

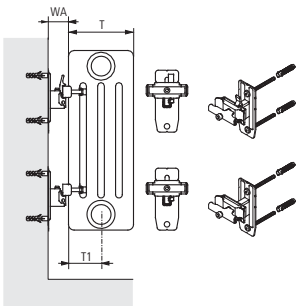


Fig. Wall bracket ZB0287, Sano clamp holder ZB0305 wall bracket ZB0287, Sano clamp holder ZB0305

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	45–55 55–70 70–100
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items Fig.1 Suitable wall bracket short ZB0287 top	Fig.1 Sano clamp holder top	Fig.1 Spacer complete ZB0280 bottom	Fig.2 Suitable wall bracket short ZB0287 bottom
2 columns					
300–1100	6–32	2x	2x	2x	2x
	33–48	3x	3x	3x	3x
	49–60	4x	4x	4x	4x
>1100–2200	6–24	2x	2x	2x	2x
	25–38	3x	3x	3x	3x
	39–50	4x	4x	4x	4x
	51–60	5x	5x	5x	5x
>2200–3000	6–24	2x	2x	2x	2x
	25–30	3x	3x	3x	3x
3 & 4 columns					
300–450	6–34	2x	2x	2x	2x
	35–50	3x	3x	3x	3x
	51–60	4x	4x	4x	4x
>450–1100	6–26	2x	2x	2x	2x
	27–40	3x	3x	3x	3x
	41–56	4x	4x	4x	4x
	57–60	5x	5x	5x	5x
>1100–2200	6–14	2x	2x	2x	2x
	15–22	3x	3x	3x	3x
	23–30	4x	4x	4x	4x
	31–38	5x	5x	5x	5x
	39–46	6x	6x	6x	6x
	47–54	7x	7x	7x	7x
	55–60	8x	8x	8x	8x
>2200–3000	6–14	2x	2x	2x	2x
	15–22	3x	3x	3x	3x
	23–30	4x	4x	4x	4x
5 & 6 columns					
300–450	6–18	3x	3x	3x	3x
	19–24	4x	4x	4x	4x
	25–30	5x	5x	5x	5x
	31–36	6x	6x	6x	6x
	37–42	7x	7x	7x	7x
	43–48	8x	8x	8x	8x
	49–54	9x	9x	9x	9x
	55–60	10x	10x	10x	10x
>450–1100	6–16	2x	2x	2x	2x
	17–26	3x	3x	3x	3x
	27–34	4x	4x	4x	4x
	35–42	5x	5x	5x	5x
	43–50	6x	6x	6x	6x
	51–60	7x	7x	7x	7x
>1100–1500	6–16	2x	2x	2x	2x
	17–24	3x	3x	3x	3x
	25–30	4x	4x	4x	4x
	31–36	5x	5x	5x	5x
	37–44	6x	6x	6x	6x
	45–52	7x	7x	7x	7x
	53–58	8x	8x	8x	8x
	59–60	9x	9x	9x	9x
>1500–3000	6–10	2x	2x	2x	2x
	11–16	3x	3x	3x	3x
	17–20	4x	4x	4x	4x
	21–24	5x	5x	5x	5x
	25–30	6x	6x	6x	6x

* Please request separate allocation for variable wall bracket (ZB0287) with wall distance 60–100 mm.

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket variable **ZB0287**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket variable – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 35–45 mm	AF	**ZB0287 0001**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 45–60 mm	AF	**ZB0287 0002**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 60–100 mm	AF	**ZB0287 0003**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
Sano clamp holder **ZB0305**		• Clamp holder for wall and built-into-wall bracket, for screwing on Sano radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0305 0001**	6.96
				CF	**ZB0305** [1]	8.70
				SF	**ZB0305** [1]	8.70
Complete spacer **ZB0280 0001–** **ZB0280 0002**		• Infinitely adjustable depth • Material/surface: – White plastic	WA = 25–60 mm	–	**ZB0280 0001**	2.39
		• Infinitely adjustable depth • Material/surface: – Grey plastic	WA = 25–60 mm	–	**ZB0280 0002**	2.39
Spacer extension **ZB0294 0001**		• For spacer ZB0280 • Comprising: – 2 extension pieces • Material: – Aluminium	L = 35 mm	–	**ZB0294 0001**	6.76

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 3 (e.g. schools)*.

Special features:

- **For Sano radiators**
- **The number of fixing brackets must not be less than the minimum**
- For a wall distance > 50 mm, only use in conjunction with dehinging safety device and shift restraint
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For Sano radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

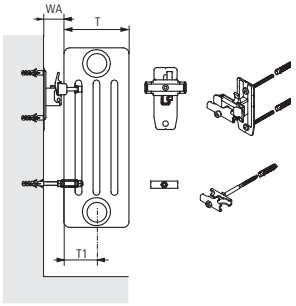


Fig. Wall bracket ZB0287, Sano clamp holder ZB0305 holder ZB0258

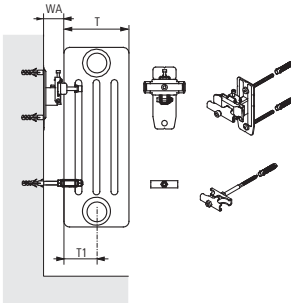


Fig. Wall bracket ZB0287, Sano clamp holder ZB0305, dehinging safety device and shift restraint ZK0020, holder ZB0258

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	45–55 55–70 70–100
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

Height [mm]	Length Elements	Item and number of items: Suitable variable wall bracket ZB0287 top	Sano clamp holder ZB0305 top	Holder ZB0258 bottom
2 columns				
300–750	6–14	2x	2x	2x
	15–20	3x	3x	3x
	21–28	4x	4x	4x
	29–34	5x	5x	5x
	35–40	6x	6x	6x
	41–46	7x	7x	7x
	47–54	8x	8x	8x
	55–60	9x	9x	9x
>750–2200	6–16	2x	2x	2x
	17–22	3x	3x	3x
	23–30	4x	4x	4x
	31–36	5x	5x	5x
	37–42	6x	6x	6x
	43–48	7x	7x	7x
	49–58	8x	8x	8x
	59–60	9x	9x	9x
>2200–3000	6–18	2x	2x	2x
	19–26	3x	3x	3x
	27–30	4x	4x	4x
3 & 4 columns				
300–750	6–16	2x	2x	2x
	17–22	3x	3x	3x
	23–30	4x	4x	4x
	31–36	5x	5x	5x
	37–44	6x	6x	6x
	45–50	7x	7x	7x
	51–58	8x	8x	8x
	59–60	9x	9x	9x
>750–2200	6–12	2x	2x	2x
	13–20	3x	3x	3x
	21–26	4x	4x	4x
	27–32	5x	5x	5x
	33–38	6x	6x	6x
	39–44	7x	7x	7x
	45–52	8x	8x	8x
	53–58	9x	9x	9x
	59–60	10x	10x	10x
>2200–3000	6–12	2x	2x	2x
	13–20	3x	3x	3x
	21–26	4x	4x	4x
	27–30	5x	5x	5x
	39–49	6x	6x	6x
	47–54	7x	7x	7x
	55–60	8x	8x	8x
5 & 6 columns		See page after next		

* Please request separate allocation for variable wall bracket (ZB0287) with wall distance 60–100 mm.

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket variable **ZB0287**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket variable – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 35–45 mm	AF	**ZB0287 0001**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 45–60 mm	AF	**ZB0287 0002**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 60–100 mm	AF	**ZB0287 0003**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
Dehinging safety device and shifting restraint set **ZK0020 0001, ZK0020 0002**		• For ZB0282 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0001**	16.02
		• For ZB0287 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0002**	16.02
Sano clamp holder **ZB0305**		• Clamp holder for wall and built-into-wall bracket, for screwing on Sano radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0305 0001**	6.96
				CF	**ZB0305** [1]	8.70
				SF	**ZB0305** [1]	8.70
Bracket **ZB0258**		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH WALL BRACKET

Minimum number of brackets

depending on the model and its length in elements according to VDI 6036 – requirement class 3 (e.g. schools).

Special features:

- **For Sano radiators**
- **The number of fixing brackets must not be less than the minimum**
- For a wall distance > 50 mm, only use in conjunction with dehinging safety device and shift restraint
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- For Sano radiators with a length of less than 6 elements, ask about a suitable fixing system.
- Stated number of fixing points tested on a wall of T14 vertical coring lightweight brick with 15 mm thick gypsum plaster and appropriate to recommended connection situations according to VDI 6036 Appendix D. For definition of VDI 6036 Appendix D, see "General information – VDI 6036".
- Wall-building material needs to be tested on site for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

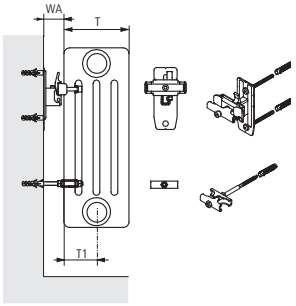


Fig. Wall bracket ZB0287, Sano clamp holder ZB0305 holder ZB0258

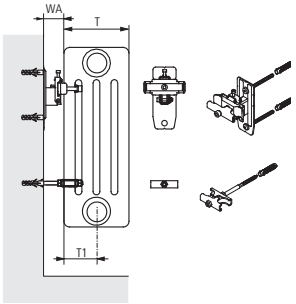


Fig. Wall bracket ZB0287, Sano clamp holder ZB0305, dehinging safety device and shift restraint ZK0020, holder ZB0258

Number of columns	T [mm]	T1 [mm]	Distance to wall WA [mm]
2 columns	65	32.5	45–55 55–70 70–100
3 columns	105	52.5	
4 columns	145	72.5	
5 columns	185	92.5	
6 columns	225	112.5	

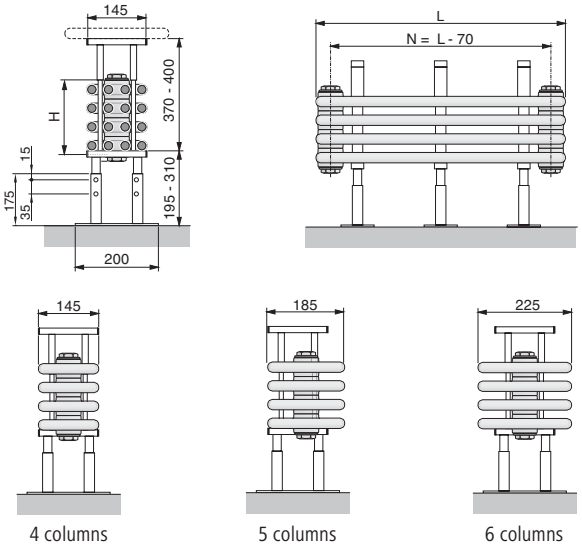
Height [mm]	Length Elements	Item and number of items: Suitable wall bracket variable ZB0282 top	Sano clamp holder ZB0305 top	Holder ZB0258 bottom
5 & 6 columns				
300–450	6–8	2x	2x	2x
	9–14	3x	3x	3x
	15–18	4x	4x	4x
	19–24	5x	5x	5x
	25–28	6x	6x	6x
	29–32	7x	7x	7x
	33–38	8x	8x	8x
	39–42	9x	9x	9x
	43–46	10x	10x	10x
	47–50	11x	11x	11x
	51–56	12x	12x	12x
>450–1500	6–12	2x	2x	2x
	13–18	3x	3x	3x
	19–22	4x	4x	4x
	23–28	5x	5x	5x
	29–34	6x	6x	6x
	35–38	7x	7x	7x
	39–44	8x	8x	8x
	45–50	9x	9x	9x
	51–54	10x	10x	10x
	55–60	11x	11x	11x
>1500–3000	6–8	2x	2x	2x
	9–14	3x	3x	3x
	15–20	4x	4x	4x
	21–24	5x	5x	5x
	25–28	6x	6x	6x
	29–30	7x	7x	7x

WALL FIXING

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Wall bracket variable **ZB0287**		• Wall bracket for clamp holder or suspension lugs • Comprising: – 1 wall bracket variable – Dehinging safety device – Screws and dowels • Surface: – Finished in |AF|, |CF|, |SF|	WA = 35–45 mm	AF	**ZB0287 0001**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 45–60 mm	AF	**ZB0287 0002**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
			WA = 60–100 mm	AF	**ZB0287 0003**	13.79
				CF	**ZB0287** [1]	17.24
				SF	**ZB0287** [1]	17.24
Dehinging safety device and shifting restraint set **ZK0020 0001, ZK0020 0002**		• For ZB0282 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0001**	16.02
		• For ZB0287 • Comprising: – 2 dehinging safety device and shift restraint brackets • Material/surface: – Stainless steel		–	**ZK0020 0002**	16.02
Sano clamp holder **ZB0305**		• Clamp holder for wall and built-into-wall bracket, for screwing on Sano radiators • WA = WA wall bracket + 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	60 x 25 mm	AF	**ZB0305 0001**	6.96
				CF	**ZB0305** [1]	8.70
				SF	**ZB0305** [1]	8.70
Bracket **ZB0258**		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH BENCH BRACKET ZB0032



4 columns 5 columns 6 columns

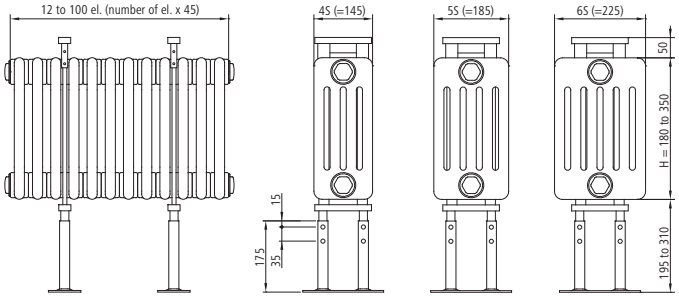
H: height
L: length
N: hub distance

Special features:

- **For bench radiators**
- **The number of fixing brackets must not be less than the minimum**
- The brackets ZB0032 are included in the range available
- Brackets are lacquered (can also be delivered galvanised)
- Bench or shelf is not included in the range available
- Bench has to be fitted on site
- On the construction site, the floor building material has to be checked for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

Height	Length	Number of brackets AK I+II	Number of brackets AK III
[mm]	[mm]	[pc.]	[pc.]
180–315	1200	2	2
	1500–2000	3	4
	2500–3000	4	6

FIXING WITH BENCH BRACKET ZB0226



GL: element
H: height

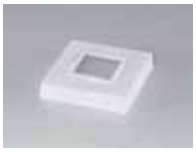
Special features:

- **For standard column radiators and Cambiotherm**
- **Possible up to and including height of 350 mm**
- The number of fixing brackets must not be less than the minimum.
- Bench or shelf is not included in the range available
- Bench has to be fitted on site
- On the construction site, the floor building material has to be checked for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

Height	AK I+II Length from	AK I+II Length to	AK I+II Number of brackets	AK III Length from	AK III Length to	AK III Number of brackets
[mm]	[el.]	[el.]	[pc.]	[el.]	[el.]	[pc.]
180–350	12	25	2	12	25	2
	26	45	3	26	45	4
	46	65	4	46	65	6
	66	100	5	66	85	7
				86	100	8

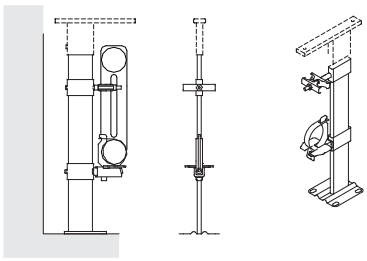
Weight of the bench was not taken into account
Max. loading capacity of the bracket 500 kg (static).

FLOOR FIXINGS

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Bench bracket **ZB0032**		• Height adjustable • Distance from floor: 195–310 mm • For bench radiator with sill support • Profile: 25 x 25 mm • Surface: – Finished in |AF|, |CF|, |SF| – Galvanised |ZN|	H (total= 565–710 mm	AF	**ZB0032 0002**	86.25
				CF	**ZB0032** [1]	107.81
				SF	**ZB0032** [1]	107.81
				ZN	**ZB0032 0001**	73.05
Bench bracket **ZB0226**		• For column radiators up to a height of 350 mm with sill support • Height adjustable • Distance from floor: 195–310 mm • Profile: 25 x 25 mm • Surface: – Finished in |AF|, |CF|, |SF| – Galvanised |ZN|	H (total) = 565–710 mm	AF	**ZB0226 0002**	85.33
				CF	**ZB0226** [1]	106.66
				SF	**ZB0226** [1]	106.66
				ZN	**ZB0226 0001**	77.57
Cover rosette **ZB0033 0001**		• For bench bracket ZB0032 installed on unfinished floor (2 pc. per bracket) • For support bracket ZB0340 and ZB0341 • Material: – White plastic	56 x 56 mm opening: 25 x 25 mm	–	**ZB0033 0001**	2.32
Cover rosette **ZB0034 0002**		• Covers the entire floor slab • For bench bracket ZB0032 that is installed on finished floor • Material: – White plastic	204 x 84 mm opening: 25 x 25 mm	–	**ZB0034 0002**	10.08

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

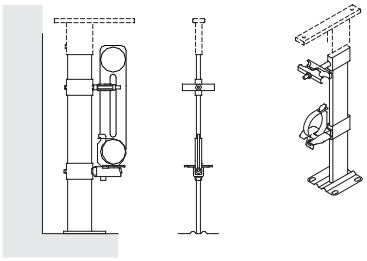
FIXING WITH SOIL STAND BRACKETS



Soil stand bracket
ZB0308

Available with
window sill support
ZC0105 / ZC0106 on request

With carrier set
ZB0349



Soil stand bracket
ZB0308

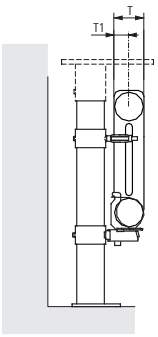
Available with
window sill support
ZC0105 / ZC0106 on request

With carrier set
ZB0350

Special features:

- **For standard column radiators and Sano radiators**
- The number of fixing brackets must not be less than the minimum.
- Up to a length of 750 mm suitable for **requirement class 1, 2, and 3** (for installation on unfinished floor up to 900 mm).
- Up to a length of 1200 mm suitable for **requirement class 1 and 2.**
- Recommendation:
  - for finished floor:
    pipe length = BH + 150 mm
  - for unfinished floor:
    pipe length = BH + 300 mm.
- Combination with WVO radiation shields on request

Minimum number of soil stand brackets
depending on the model and its length in elements according to VDI 6036 – requirement class 1, 2, and 3 (e.g. schools).



Number of columns	T [mm]	T1 [mm]
2 columns	65	32.5
3 columns	105	52.5
4 columns	145	72.5
5 columns	185	92.5
6 columns	225	112.5

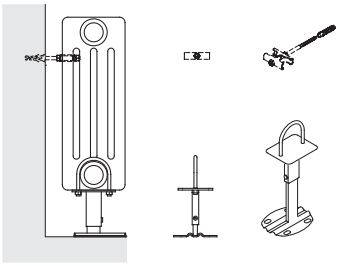
AK I+II Height [mm]	AK III Height [mm]	Length Elements	Item and number of items: Soil stand bracket ZB0308	Carrier set for column radiators ZB0349	Carrier set for Sano radiators ZB0350
2–6 columns					
300–900	**300–600**	8–26	2x	2x	2x
		27–42	3x	3x	3x
		43–56	4x	4x	4x
		57–70	5x	5x	5x
		71–84	6x	6x	6x
		85–98	7x	7x	7x

FLOOR FIXINGS

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Soil stand bracket **ZB0308**		• With floor slab 105 x 10 mm for screw mounting – Space between drill holes 80 mm • Rectangular pipe 60 x 10 mm • Surface: – Finished in |AF|, |CF|, |SF|	H = 450 mm	AF	**ZB0308 0001**	17.61
				CF	**ZB0308** [1]	22.01
				SF	**ZB0308** [1]	22.01
			H = 550 mm	AF	**ZB0308 0002**	17.61
				CF	**ZB0308** [1]	22.01
				SF	**ZB0308** [1]	22.01
			H = 600 mm	AF	**ZB0308 0003**	17.61
				CF	**ZB0308** [1]	22.01
				SF	**ZB0308** [1]	22.01
			H = 650 mm	AF	**ZB0308 0004**	17.61
				CF	**ZB0308** [1]	22.01
				SF	**ZB0308** [1]	22.01
			H = 750 mm	AF	**ZB0308 0005**	17.61
				CF	**ZB0308** [1]	22.01
				SF	**ZB0308** [1]	22.01
			H = 850 mm	AF	**ZB0308 0006**	21.66
				CF	**ZB0308** [1]	27.08
				SF	**ZB0308** [1]	27.08
			H = 900 mm	AF	**ZB0308 0007**	21.66
				CF	**ZB0308** [1]	27.08
				SF	**ZB0308** [1]	27.08
			H = 1050 mm	AF	**ZB0308 0008**	21.66
				CF	**ZB0308** [1]	27.08
				SF	**ZB0308** [1]	27.08
			H = 1200 mm	AF	**ZB0308 0009**	21.66
				CF	**ZB0308** [1]	27.08
				SF	**ZB0308** [1]	27.08
Support set **ZB0349,** **ZB0350**		• For soil stand bracket 60 x 10 mm • For column radiator • Comprising: – 1 carrier, top holder – 1 carrier lower hub intake, infinitely adjustable in depth – 1 adapter holder for 3 and 5 columns • Surface: – Finished in |AF|, |CF|, |SF|	A = 50–60 mm	AF	**ZB0349 0001**	40.63
				CF	**ZB0349** [1]	50.79
				SF	**ZB0349** [1]	50.79
		• For soil stand bracket 60 x 10 mm • For Sano radiators • Comprising: – 1 carrier, top holder – 1 carrier lower hub intake, infinitely adjustable in depth – 1 adapter holder for 3 and 5 columns • Surface: – Finished in |AF|, |CF|, |SF|	A = 50–60 mm	AF	**ZB0350 0001**	47.41
				CF	**ZB0350** [1]	59.26
				SF	**ZB0350** [1]	59.26
Cover rosette **ZB0373**		• For soil stand bracket 60 x 10 mm • For installation on unfinished floor • Material: – White plastic • Surface: – Finished in |CF|, |SF|	100 x 40 mm Opening: 60 x 10 mm	–	**ZB0373 0001**	5.43
				CF	**ZB0373** [1]	6.79
				SF	**ZB0373** [1]	6.79
Cover rosette **ZB0374**		• For soil stand bracket 60 x 10 mm • For finished floor mounting • Material: – White plastic • Surface: – Finished in |CF|, |SF|	115 x 110 mm Opening: 60 x 10 mm	–	**ZB0374 0001**	11.50
				CF	**ZB0374** [1]	14.38
				SF	**ZB0374** [1]	14.38
Window sill support **ZC0105,** **ZC0106**		• For soil stand bracket 60 x 10 mm • Adjustment range 80–120 mm • Shelf (window sill) on site • Do not use as a seat • Surface: – Finished in |AF|, |CF|, |SF|	L = 160 mm	AF	**ZC0105 0001**	21.66
				CF	**ZC0105** [1]	27.08
				SF	**ZC0105** [1]	27.08
			L = 200 mm	AF	**ZC0106 0001**	21.66
				CF	**ZC0106** [1]	27.08
				SF	**ZC0106** [1]	27.08

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH LIFTING BRACKETS



Top:

Optionally available
Bracket
ZB0257 or ZB0258

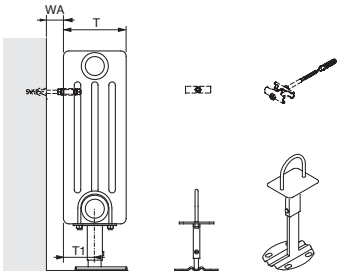
Bottom:

Floor lifting brackets
ZB0028

Special features:

- **For standard column radiators and Sano radiators**
- The number of fixing brackets must not be less than the minimum.
- For dimensions of column radiators outside the indicated ranges, the number of fixing points corresponds to the sum of the number of single blocks, or on request.
- **Requirement class 1 and 2**
  - As of a height of 600 mm, a holder ZB0257 or ZB0258 should be used if possible
- **Requirement class 3**
  - A wall support must always be used
- Please note the composition of the wall and the floor and carefully select the appropriate fixing variants, including dowels and screws.
- On the construction site, the wall and floor building material has to be checked for sufficient loading capacity.
- Where no information has been provided with the order regarding the requirement class or type / place of application, the brackets are always delivered acc. to requirement class 1 and 2.

Minimum number of lifting brackets
depending on the model and its length in elements according to VDI 6036 – requirement class 1, 2, and 3 (e.g. schools).



Height [mm]	Length Elements	Item and number of items: Floor lifting bracket ZB0028	Holder ZB0257 or ZB0258 AK I+II	Holder ZB0257 or ZB0258 AK III
2–3 columns				
190*–750	6–25	2x	1x per bracket recommended from a height of 600 mm	2x
	26–50	3x		3x
	51–75	4x		4x
	76–90	5x		5x
900–2000	6–25	2x		2x
	26–50	3x		3x
	51–60	4x		4x
2200–3000	6–25	2x		2x
	26–60	3x		3x
4 columns				
190*–750	6–25	2x	1x per bracket recommended from a height of 600 mm	2x
	26–50	3x		3x
	51–75	4x		4x
	76–90	5x		5x
900–2000	6–25	2x		2x
	26–50	3x		3x
2200–3000	6–25	3x		3x
	26–60	5x		5x
5 columns				
180*–750	6–25	2x	1x per bracket recommended from a height of 600 mm	2x
	26–50	4x		4x
	51–75	5x		5x
900–2000	6–25	3x		3x
	26–50	5x		5x
2200–3000	6–25	3x		3x
	26–60	5x		5x
6 columns				
180*–750	6–25	2x	1x per bracket recommended from a height of 600 mm	2x
	26–50	4x		4x
	51–75	5x		5x
900–2000	6–15	3x		3x
	16–30	5x		5x
2200–3000	6–15	4x		4x
	16–30	6x		6x

Number of columns	T [mm]	T1 [mm]
2 columns	65	32.5
3 columns	105	52.5
4 columns	145	72.5
5 columns	185	92.5
6 columns	225	112.5

* The holders ZB0257 and ZB0258 are not suitable for heights of 180 mm and 190 mm.

FLOOR FIXINGS

Description Product code		Feature	Dimensions Order code |4|	Surface/ Finish Order code |17|	Product Model Order code |3|	Price [EUR]
Floor lifting bracket **ZB0028**		• Infinitely adjustable height • Rectangular pipe: 30 x 10 mm • Surface: – Finished in |AF|, |CF|, |SF| – Galvanised |ZN|	H = 200–230 mm	AF	**ZB0028 0002**	42.67
				CF	**ZB0028** [1]	53.34
				SF	**ZB0028** [1]	53.34
				ZN	**ZB0028 0001**	36.31
Bracket **ZB0257–** **ZB0258**		• For standard column radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0257 0001**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
			L = 160 mm	AF	**ZB0257 0002**	6.62
				CF	**ZB0257** [1]	8.28
				SF	**ZB0257** [1]	8.28
		• For Sano radiators • Infinitely adjustable depth • Surface: – Finished in |AF|, |CF|, |SF|	L = 130 mm	AF	**ZB0258 0001**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28
			L = 160 mm	AF	**ZB0258 0002**	6.62
				CF	**ZB0258** [1]	8.28
				SF	**ZB0258** [1]	8.28
Cover rosette **ZB0119 0001**		• For floor lifting bracket ZB0028 installed on unfinished floor • Material: – White plastic	70 x 40 mm opening: 30 x 10 mm	–	**ZB0119 0001**	2.32
Cover rosette **ZB0029 0001**		• For floor lifting bracket ZB0028 installed on finished floor • Material: – White plastic	130 x 110 mm opening: 30 x 10 mm	–	**ZB0029 0001**	10.08

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FIXING WITH BRACKET AND SUSPENSION LUGS

Number of suspension lugs

depending on the model and its length in elements according to VDI 6036 – requirement class 1 and 2. Requirement class 3 (e.g. schools) on request

Special features:

- Please note the composition of the wall and choose carefully the appropriate fixing versions as well as the dowels and screws.
- From 6 suspension lugs and
  - even number of elements: lugs arranged in the centre
  - uneven number of elements: centre lugs offset to the right (view from the front)

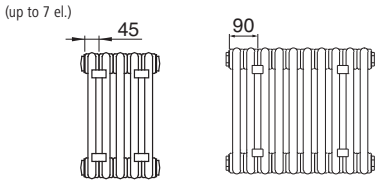
Order code	Additional price per lug
|16|	[EUR]
B2	16.78

Number of columns	T [mm]	T1 [mm]
2 columns	65	32.5
3 columns	105	52.5
4 columns	145	72.5
5 columns	185	92.5
6 columns	225	112.5

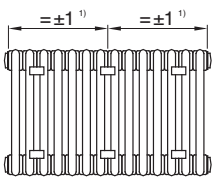
Height [mm]	Length Elements	Number of suspension lugs
2 columns		
300–750	6–24	4
	25–44	6
	45–58	8
	59–72	10
	73–86	12
>750–2000	6–24	4
	25–44	6
	45–58	8
	59–64	10
>2000–3000	6–24	4
3–4 columns		
190 – 750	6–24	4
	25–44	6
	45–58	8
	59–72	10
	73–86	12
>750–2000	6–24	4
	25–44	6
>2000–3000	6–24	4
5 columns		
300–750	6–24	4
	25–44	8
	45–58	10
	59–64	12
>750–2000	6–24	4
	25–44	8
>2000–3000	6–24	6
6 columns		
>350–750	6–24	4
	25–44	8
	45–58	10
	59–64	12
>750–2000	6–24	4
>2000–3000	6–24	6

Distances of the suspension lugs (back view)

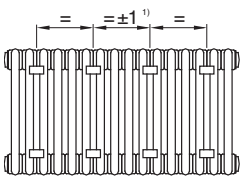
4 suspension lugs



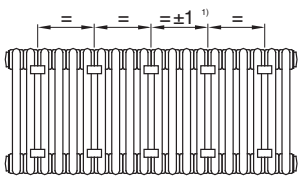
6 suspension lugs



8 suspension lugs

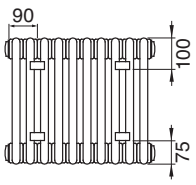


10 suspension lugs

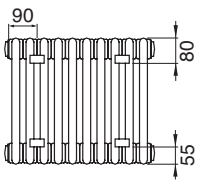


1) Depending on the total number of elements, one element more or one element less

2 columns



3 to 6 columns



ARBONIA COLUMN RADIATORS: ACCESSORIES

In the following section, you will find:

- Accessories–fittings
- Accessories–additions
- Fitting accessories
- Covers
- Assembling aids

ACCESSORIES–FITTINGS

Description Product code		Feature	Dimensions ordering code |4|	Surface/finish ordering code |17|	Product Model Ordering code |3|	Price [EUR]
Thermostatic sensor head **ZV0073 0001**		• Oventrop brand • For radiators with built-in valve • M30 x 1.5 • Design: – |CR|	–	CR	**ZV0073 0001**	36.77
Upper part of the thermostat **ZV0170 0001**		• Standard • For thermostatic sensor head with M30 x 1.5 • For radiators with built-in valve • k_v value adjustable	–	–	**ZV0170 0001**	8.83
Upper part of the thermostat **ZV0005 0001**		• Fine adjustment • For thermostatic sensor head with M30 x 1.5 • For radiators with built-in valve • k_v value adjustable	–	–	**ZV0005 0001**	8.83
Upper part of the thermostat **ZV0006 0001**		• Standard • For thermostatic sensor head with clamp connection • For radiators with built-in valve • k_v value adjustable	–	–	**ZV0006 0001**	14.13
Upper part of the thermostat **ZV0007 0001**		• Fine adjustment • For thermostatic sensor head with clamp connection • For radiators with built-in valve • k_v value adjustable	–	–	**ZV0007 0001**	14.13
Air vent **ZT0009 0001–ZT0009 0003**		• With valve and rotatable outflow head • With O-ring seal • Surface: – Gloss nickel-plated • Surface of outflow head: – White	G ¼" G ⅜" G ½"	White White White	**ZT0009 0001** **ZT0009 0002** **ZT0009 0003**	1.88 5.12 5.12
Blanking plug **ZT0008 0001–ZT0008 0002**		• With O-ring seal • Width across flats 22 mm • Surface: – Gloss nickel-plated	G ½" G ⅜"	– –	**ZT0008 0001** **ZT0008 0002**	0.79 0.79
Valve shut-off block straight form **ZV0040**		Comprising: • Valve shut-off block – Straight – 50 mm axial distance – For connecting 2-pipe radiators to 1-pipe or 2-pipe systems (adjustable bypass) – With integrated valve for thermostat with M30 x 1.5 – For radiators with G ½" internal thread – Lockable and presettable – Flow and return freely selectable (note flow and return on radiator) – Self-sealing to radiator • Matching cover • Surface cover: – Finished in |AF| – |CR| – Stainless steel appearance	G ½" external thread x G ¾" external thread	AF CR Stainless steel	**ZV0040 0001** **ZV0040 0002** **ZV0040 0003**	97.03 124.95 136.51

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

ACCESSORIES–FITTINGS

Description Product code		Feature	Dimensions ordering code |4|	Surface/finish ordering code |17|	Product Model Ordering code |3|	Price [EUR]
Valve shut-off block angle form **ZV0041**		Comprising: • Valve shut-off block – Angled – 50 mm axial distance – For connecting 2-pipe radiators to 1-pipe or 2-pipe systems (adjustable bypass) – With integrated valve for thermostat with M30 x 1.5 – For radiators with G ½″ internal thread – Lockable and presettable – Flow and return freely selectable (note flow and return on radiator) – Self-sealing to radiator • Matching cover • Surface cover: – Finished in |AF| – |CR| – Stainless steel appearance	G ½″ external thread x G ¾″ external thread	AF	**ZV0041 0001**	97.03
				CR	**ZV0041 0002**	124.95
				Stainless steel	**ZV0041 0003**	136.51
Reducer **ZT0010 0001**		• With O-ring seal • For 2-pipe connections • Surface: – Gloss nickel-plated	G ½″ external thread x G ⅜″ internal thread	–	**ZT0010 0001**	1.88
Reducer **ZT0011 0001**		• Built-in valve (50 mm axial distance flow/return) • Surface: – Gloss nickel-plated	G ½″ external thread x G ¾″ external thread	–	**ZT0011 0001**	5.43

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FITTING ACCESSORIES

Description Product code		Feature	Dimensions ordering code |4|	Surface/finish ordering code |17|	Product Model Ordering code |3|	Price [EUR]
Blanking plug with brim **ZT0093**		• Left-hand thread • Incl. EPDM seal • Surface: – Rough – Finished in |AF|, |CF|, |SF|	L 1¼″	–	**ZT0093 0001**	2.21
			L 1¼″	AF	**ZT0093 0002**	5.00
			L 1¼″	CF	**ZT0093** [1]	6.25
			L 1¼″	SF	**ZT0093** [1]	6.25
Blanking plug with brim **ZT0094**		• Right-hand thread • Incl. EPDM seal • Surface: – Rough – Finished in |AF|, |CF|, |SF|	R 1¼″	–	**ZT0094 0001**	2.21
			R 1¼″	AF	**ZT0094 0002**	5.00
			R 1¼″	CF	**ZT0094** [1]	6.25
			R 1¼″	SF	**ZT0094** [1]	6.25
Set of plugs with brim **ZT0095**		• Left-hand thread • Incl. EPDM seal • Surface: – Rough – Finished in |AF|, |CF|, |SF|	L 1¼″ x ¼″	–	**ZT0095 0001**	2.21
			L 1¼″ x ¼″	AF	**ZT0095** [1]	5.29
			L 1¼″ x ¼″	CF	**ZT0095** [1]	6.61
			L 1¼″ x ¼″	SF	**ZT0095** [1]	6.61
			L 1¼″ x ⅜″	–	**ZT0095 0002**	2.21
			L 1¼″ x ⅜″	AF	**ZT0095 0003**	5.29
			L 1¼″ x ⅜″	CF	**ZT0095** [1]	6.61
			L 1¼″ x ⅜″	SF	**ZT0095** [1]	6.61
			L 1¼″ x ½″	–	**ZT0095 0004**	2.21
			L 1¼″ x ½″	AF	**ZT0095 0005**	5.29
			L 1¼″ x ½″	CF	**ZT0095** [1]	6.61
			L 1¼″ x ½″	SF	**ZT0095** [1]	6.61
			L 1¼″ x ¾″	–	**ZT0095 0006**	2.21
			L 1¼″ x ¾″	AF	**ZT0095 0007**	5.29
			L 1¼″ x ¾″	CF	**ZT0095** [1]	6.61
			L 1¼″ x ¾″	SF	**ZT0095** [1]	6.61
			L 1¼″ x 1″	–	**ZT0095 0008**	2.21
			L 1¼″ x 1″	AF	**ZT0095** [1]	5.29
			L 1¼″ x 1″	CF	**ZT0095** [1]	6.61
			L 1¼″ x 1″	SF	**ZT0095** [1]	6.61
Set of plugs with brim **ZT0096**		• Right-hand thread • Incl. EPDM seal • Surface: – Rough – Finished in |AF|, |CF|, |SF|	R 1¼″ x ¼″	–	**ZT0096 0001**	2.21
			R 1¼″ x ¼″	AF	**ZT0096** [1]	5.29
			R 1¼″ x ¼″	CF	**ZT0096** [1]	6.61
			R 1¼″ x ¼″	SF	**ZT0096** [1]	6.61
			R 1¼″ x ⅜″	–	**ZT0096 0002**	2.21
			R 1¼″ x ⅜″	AF	**ZT0096 0003**	5.29
			R 1¼″ x ⅜″	CF	**ZT0096** [1]	6.61
			R 1¼″ x ⅜″	SF	**ZT0096** [1]	6.61
			R 1¼″ x ½″	–	**ZT0096 0004**	2.21
			R 1¼″ x ½″	AF	**ZT0096 0005**	5.29
			R 1¼″ x ½″	CF	**ZT0096** [1]	6.61
			R 1¼″ x ½″	SF	**ZT0096** [1]	6.61
			R 1¼″ x ¾″	–	**ZT0096 0006**	2.21
			R 1¼″ x ¾″	AF	**ZT0096 0007**	5.29
			R 1¼″ x ¾″	CF	**ZT0096** [1]	6.61
			R 1¼″ x ¾″	SF	**ZT0096** [1]	6.61
			R 1¼″ x 1″	–	**ZT0096 0008**	2.21
			R 1¼″ x 1″	AF	**ZT0096** [1]	5.29
			R 1¼″ x 1″	CF	**ZT0096** [1]	6.61
			R 1¼″ x 1″	SF	**ZT0096** [1]	6.61

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

FITTING ACCESSORIES

Description Product code		Feature	Dimensions ordering code |4|	Surface/finish ordering code |17|	Product Model Ordering code |3|	Price [EUR]
Set of plugs with brim **ZT0097**		• Right-hand thread • Incl. EPDM seal • Surface: – Rough – Finished in |AF|, |CF|, |SF|	R 1¼" x ⅜"	–	**ZT0097 0001**	5.29
			R 1¼" x ⅜"	AF	**ZT0097 0005**	5.29
			R 1¼" x ⅜"	CF	**ZT0097** [1]	6.61
			R 1¼" x ⅜"	SF	**ZT0097** [1]	6.61
			R 1¼" x ½"	–	**ZT0097 0002**	5.29
			R 1¼" x ½"	AF	**ZT0097 0006**	5.29
			R 1¼" x ½"	CF	**ZT0097** [1]	6.61
			R 1¼" x ½"	SF	**ZT0097** [1]	6.61
			R 1¼" x ¾"	–	**ZT0097 0003**	5.29
			R 1¼" x ¾"	AF	**ZT0097 0007**	5.29
			R 1¼" x ¾"	CF	**ZT0097** [1]	6.61
			R 1¼" x ¾"	SF	**ZT0097** [1]	6.61
Set of plugs with brim **ZT0098**		• Right-hand thread • With 12 mm hole in the cut-off wheel for one-pipe valve • Incl. EPDM seal • Surface: – Rough – Finished in |AF|, |CF|, |SF|	R 1¼" x ½"	–	**ZT0098 0001**	5.29
				AF	**ZT0098 0002**	5.29
				CF	**ZT0098** [1]	6.61
				SF	**ZT0098** [1]	6.61
Coupling set **ZT0099 0001**		• Comprising: – 2 seals – 2 nipples	R 1¼" x L 1¼"	–	**ZT0099 0001**	3.09
Plug sealing **ZT0024 0001**		• For finished stock radiators • Flat seal suitable for plugs and reduction made of EPDM • Asbestos-free • Black brim	52 x 41.8 x 2.25	–	**ZT0024 0001**	0.31
Coupling nipple seal **ZT0025 0001**		• For finished stock radiators • Flat seal • Asbestos-free • White brim	55.4 x 41.5 x 1.5	–	**ZT0025 0001**	1.32
Key insert **ZT0026 0001**		• For finished stock radiators • Cover insert for tightening finished blanking plugs and reduction with WF41 (internal) • Suitable for WF46 (external)	56 x 17	–	**ZT0026 0001**	3.10
Coupling tool **ZT0027 0001, ZT0027 0002**		• For on-site nippling of column radiators	L = 750	–	**ZT0027 0001**	248.18
			L = 1250	–	**ZT0027 0002**	310.23

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

ACCESSORIES–FITTINGS

Description Product code		Feature	Dimensions ordering code |4|	Surface/finish ordering code |17|	Product Model Ordering code |3|	Price [EUR]
Towel rail **ZC0009**		• Comprising: – 2 holders (ZC0010 0001) – Flat pipe 1000 x 30 x 10 mm (to be cut to length on site if necessary) • Surface of holder: – |CR| • Surface of steel pipe: – Finished in |AF|, |CF|, |SF|	L = 1000 mm T = 45 mm, projecting	AF	**ZC0009 0002**	150.15
				CF	**ZC0009** [1]	187.69
				SF	**ZC0009** [1]	187.69
				CR	**ZC0009 0001**	228.02
Bracket **ZC0010**		• For towel rail ZC0009 • Comprising: – 2 piece • Surface of holder: – |CR|	–	CR	**ZC0010 0001**	114.63

COVERS

Description Product code		Feature	Dimensions ordering code |4|	Surface/finish ordering code |17|	Product Model Ordering code |3|	Price [EUR]
Cap set **ZA0092 0001**		• For screws with width across flats of 13 mm • Comprising: – 12 caps • Material/surface: – White	White	–	**ZA0092 0001**	2.08
Cap set **ZA0092 0002**		• For screws with width across flats of 13 mm • Comprising: – 12 caps • Material/surface: – RAL 7024	RAL 7024	–	**ZA0092 0002**	2.08

ASSEMBLING AIDS

Description Product code		Feature	Dimensions ordering code |4|	Surface/finish ordering code |17|	Product Model Ordering code |3|	Price [EUR]
Touch-up pen **ZK0010 0001**		• For repairing paint damage on finished or powder-coated radiators • 12 ml • SG silk gloss	RAL 9016	–	**ZK0010 0001**	8.52
Paint spray can **ZK0016 0001**		• Original paint for repairing paint damage on finished or powder-coated radiators • 150 ml • SG silk gloss	RAL 9016	–	**ZK0016 0001**	12.48
Cleaning brush **ZK0005 0001**		• For column radiators	–	–	**ZK0005 0001**	23.27

1) Dimensions characteristic |4|, Surface / Finish characteristic |17|, Surface / Colour characteristic |18/0| and Surface / Colour code characteristic |18| must be specified with the order (description see section "General information" and colour chart)
When delivery unit is not specified, then delivery unit will be 1 pc.

ARBONIA COLUMN RADIATORS:
FURTHER INFORMATION

In the following section, you will find:

- k_V assignment

K_v ASSIGNMENT FOR COLUMN RADIATORS WITH TWO COLUMNS

	2-column				
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
190	1–46	47–101	102–120		
260	1–34	35–76	77–107	108–120	
300	1–29	30–64	65–90	91–107	108–120
350	1–25	26–55	56–78	79–93	94–120
400	1–22	23–48	49–68	69–81	82–120
450	1–19	20–43	44–61	62–73	74–120
500	1–17	18–39	40–55	56–66	67–120
550	1–16	17–35	36–50	51–60	61–120
600	1–15	16–33	34–47	48–56	57–120
750	1–12	13–27	28–38	39–45	46–100
900	1–10	11–22	23–32	33–38	39–84
1000	1–9	10–20	21–29	30–34	35–76
1100	1–8	9–19	20–26	27–32	33–70
1200	1–7	8–17	18–24	25–29	30–64
1500	1–6	7–14	15–19	20–23	24–51
1800	1–5	6–11	12–16	17–19	20–47
2000	1–4	5–10	11–15	16–17	18–39
2200	1–4	5–9	10–13	14–16	17–36
2500	1–3	4–8	9–12	13–14	15–31
2800	1–3	4–7	8–10	11–12	13–28
3000	1–3	4–7	8–10	11–12	13–26

K_v ASSIGNMENT FOR COLUMN RADIATORS WITH THREE COLUMNS

	3 columns				
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
190	1–34	35–76	77–107	108–120	
260	1–25	26–54	55–78	79–93	94–120
300	1–21	22–46	47–65	66–78	79–120
350	1–18	19–40	41–57	58–67	68–120
400	1–16	17–35	36–50	51–60	61–120
450	1–14	15–32	33–44	45–53	54–118
500	1–13	14–29	30–40	41–48	49–107
550	1–12	13–26	27–37	38–44	45–97
600	1–11	12–24	25–34	35–40	41–90
750	1–9	10–19	20–28	29–33	34–75
900	1–7	8–16	17–23	24–28	29–61
1000	1–6	7–15	16–21	22–25	26–56
1100	1–6	7–13	14–19	20–23	24–51
1200	1–5	6–12	13–17	18–21	22–47
1500	1–4	5–10	11–14	15–17	18–38
1800	1–4	5–8	9–12	13–14	15–32
2000	1–3	4–8	9–11	12–13	14–30
2200	1–3	4–7	8–10	11–12	13–27
2500	1–3	4–6	7–9	10–11	12–24
2800	1–2	3–6	7–8	9–10	11–22
3000	1–2	3–5	6–8	9	10–21

Presetting	5.5 (yellow)	2.5 (white)	4.5 (red)	6 (black)	8 (blue)

K_v ASSIGNMENT FOR COLUMN RADIATORS WITH FOUR COLUMNS

	4 columns				
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
190	1–26	27–58	59–81	82–97	98–120
260	1–19	20–42	43–59	60–70	71–120
300	1–16	17–35	36–50	51–60	61–120
350	1–14	15–31	32–44	45–52	53–115
400	1–12	13–27	28–39	40–46	47–102
450	1–11	12–24	25–35	36–41	42–91
500	1–10	11–22	23–31	32–37	38–82
550	1–9	10–20	21–29	30–34	35–76
600	1–8	9–19	20–26	27–32	33–70
750	1–7	8–15	16–21	22–25	26–56
900	1–6	7–13	14–18	19–22	23–48
1000	1–5	6–11	12–16	17–20	21–44
1100	1–4	5–10	11–15	16–18	19–40
1200	1–4	5–10	11–14	15–17	18–37
1500	1–3	4–8	9–11	12–13	14–30
1800	1–3	4–7	8–9	10–11	12–28
2000	1–2	3–6	7–9	10	11–23
2200	1–2	3–5	6–8	9	10–21
2500	1–2	3–5	6–7	8	9–19
2800	1–2	3–4	5–6	7–8	9–17
3000	1–2	3–4	5–6	7	8–16

K_v ASSIGNMENT FOR COLUMN RADIATORS WITH FIVE COLUMNS

	5 columns				
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
190	1–22	23–48	49–68	69–81	82–100
260	1–15	16–34	35–49	50–58	59–100
300	1–13	14–29	30–40	41–48	49–100
350	1–11	12–25	26–35	36–42	43–93
400	1–10	11–22	23–31	32–37	38–83
450	1–9	10–20	21–28	29–34	35–75
500	1–8	9–18	19–25	26–30	31–67
550	1–7	8–16	17–23	24–28	29–61
600	1–7	8–15	16–22	23–26	27–57
750	1–5	6–12	13–17	18–21	22–46
900	1–4	5–10	11–15	16–18	19–39
1000	1–4	5–9	10–13	14–16	17–36
1100	1–4	5–9	10–12	13–15	16–33
1200	1–3	4–8	9–11	12–14	15–30
1500	1–3	4–6	7–9	10–11	12–25
1800	1–2	3–5	6–8	9	10–21
2000	1–2	3–5	6–8	9	10–19
2200	1–2	3–4	5–7	8	9–18
2500	1–2	3–4	5–6	7	8–16
2800	1	2–4	5	6	7–15
3000	1	2–3	4–5	6	7–14

For lengths without assignment no valves can be used since the product size exceeds the performance limit of the valve.

Presetting	5.5 (yellow)	2.5 (white)	4.5 (red)	6 (black)	8 (blue)

K_v ASSIGNMENT FOR COLUMN RADIATORS WITH SIX COLUMNS

			6 columns		
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
190	1–17	18–39	40–55	56–66	67–100
260	1–13	14–29	30–40	41–48	49–100
300	1–11	12–24	25–35	36–41	42–91
350	1–9	10–21	22–30	31–36	37–80
400	1–8	9–19	20–27	28–32	33–71
450	1–7	8–17	18–24	25–29	30–64
500	1–7	8–15	16–22	23–26	27–57
550	1–6	7–14	15–20	21–24	25–52
600	1–6	7–13	14–18	19–22	23–48
750	1–4	5–10	11–15	16–18	19–40
900	1–4	5–9	10–13	14–15	16–34
1000	1–3	4–8	9–11	12–14	15–31
1100	1–3	4–7	8–10	11–13	14–28
1200	1–3	4–7	8–10	11–12	13–26
1500	1–2	3–5	6–8	9	10–21
1800	1–2	3–5	6–7	8	9–18
2000	1–2	3–4	5–6	7	8–16
2200	1	2–4	5	6–7	8–15
2500	1	2–3	4–5	6	7–14
2800	1	2–3	4	5	6–12
3000	1	2–3	4	5	6–12

Presetting	5.5 (yellow)	2.5 (white)	4.5 (red)	6 (black)	8 (blue)

K_v ASSIGNMENT FOR SANO RADIATORS WITH TWO COLUMNS

	2-column				
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
260	1–34	35–76	77–107	108–120	
300	1–29	30–64	65–90	91–107	108–120
350	1–25	26–55	56–78	79–93	94–120
400	1–22	23–48	49–68	69–81	82–120
450	1–19	20–43	44–61	62–73	74–120
500	1–17	18–39	40–55	56–66	67–120
550	1–16	17–35	36–50	51–60	61–120
600	1–15	16–33	34–47	48–56	57–120
750	1–12	13–27	28–38	39–45	46–100
900	1–10	11–22	23–32	33–38	39–84
1000	1–9	10–20	21–29	30–34	35–76
1100	1–8	9–19	20–26	27–32	33–70
1200	1–7	8–17	18–24	25–29	30–64
1500	1–6	7–14	15–19	20–23	24–51
1800	1–5	6–11	12–16	17–19	20–47
2000	1–4	5–10	11–15	16–17	18–39
2200	1–4	5–9	10–13	14–16	17–36
2500	1–3	4–8	9–12	13–14	15–31
2800	1–3	4–7	8–10	11–12	13–28
3000	1–3	4–7	8–10	11–12	13–26

K_v ASSIGNMENT FOR SANO RADIATORS WITH THREE COLUMNS

	3 columns				
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
260	1–25	26–54	55–78	79–93	94–120
300	1–21	22–46	47–65	66–78	79–120
350	1–18	19–40	41–57	58–67	68–120
400	1–16	17–35	36–50	51–60	61–120
450	1–14	15–32	33–44	45–53	54–118
500	1–13	14–29	30–40	41–48	49–107
550	1–12	13–26	27–37	38–44	45–97
600	1–11	12–24	25–34	35–40	41–90
750	1–9	10–19	20–28	29–33	34–75
900	1–7	8–16	17–23	24–28	29–61
1000	1–6	7–15	16–21	22–25	26–56
1100	1–6	7–13	14–19	20–23	24–51
1200	1–5	6–12	13–17	18–21	22–47
1500	1–4	5–10	11–14	15–17	18–38
1800	1–4	5–8	9–12	13–14	15–32
2000	1–3	4–8	9–11	12–13	14–30
2200	1–3	4–7	8–10	11–12	13–27
2500	1–3	4–6	7–9	10–11	12–24
2800	1–2	3–6	7–8	9–10	11–22
3000	1–2	3–5	6–8	9	10–21

Presetting	5.5 (yellow)	2.5 (white)	4.5 (red)	6 (black)	8 (blue)

K_v ASSIGNMENT FOR SANO RADIATORS WITH FOUR COLUMNS

			4 columns		
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
260	1–19	20–42	43–59	60–70	71–120
300	1–16	17–35	36–50	51–60	61–120
350	1–14	15–31	32–44	45–52	53–115
400	1–12	13–27	28–39	40–46	47–102
450	1–11	12–24	25–35	36–41	42–91
500	1–10	11–22	23–31	32–37	38–82
550	1–9	10–20	21–29	30–34	35–76
600	1–8	9–19	20–26	27–32	33–70
750	1–7	8–15	16–21	22–25	26–56
900	1–6	7–13	14–18	19–22	23–48
1000	1–5	6–11	12–16	17–20	21–44
1100	1–4	5–10	11–15	16–18	19–40
1200	1–4	5–10	11–14	15–17	18–37
1500	1–3	4–8	9–11	12–13	14–30
1800	1–3	4–7	8–9	10–11	12–28
2000	1–2	3–6	7–9	10	11–23
2200	1–2	3–5	6–8	9	10–21
2500	1–2	3–5	6–7	8	9–19
2800	1–2	3–4	5–6	7–8	9–17
3000	1–2	3–4	5–6	7	8–16

K_v ASSIGNMENT FOR SANO RADIATORS WITH FIVE COLUMNS

			5 columns		
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
260	1–15	16–34	35–49	50–58	59–100
300	1–13	14–29	30–40	41–48	49–100
350	1–11	12–25	26–35	36–42	43–93
400	1–10	11–22	23–31	32–37	38–83
450	1–9	10–20	21–28	29–34	35–75
500	1–8	9–18	19–25	26–30	31–67
550	1–7	8–16	17–23	24–28	29–61
600	1–7	8–15	16–22	23–26	27–57
750	1–5	6–12	13–17	18–21	22–46
900	1–4	5–10	11–15	16–18	19–39
1000	1–4	5–9	10–13	14–16	17–36
1100	1–4	5–9	10–12	13–15	16–33
1200	1–3	4–8	9–11	12–14	15–30
1500	1–3	4–6	7–9	10–11	12–25
1800	1–2	3–5	6–8	9	10–21
2000	1–2	3–5	6–8	9	10–19
2200	1–2	3–4	5–7	8	9–18
2500	1–2	3–4	5–6	7	8–16
2800	1	2–4	5	6	7–15
3000	1	2–3	4–5	6	7–14

For lengths without assignment no valves can be used since the product size exceeds the performance limit of the valve.

Presetting	5.5 (yellow)	2.5 (white)	4.5 (red)	6 (black)	8 (blue)

K_v ASSIGNMENT FOR SANO RADIATORS WITH SIX COLUMNS

	6 columns				
Height [mm]	Length [el.]	Length [el.]	Length [el.]	Length [el.]	Length [el.]
260	1–13	14–29	30–40	41–48	49–100
300	1–11	12–24	25–35	36–41	42–91
350	1–9	10–21	22–30	31–36	37–80
400	1–8	9–19	20–27	28–32	33–71
450	1–7	8–17	18–24	25–29	30–64
500	1–7	8–15	16–22	23–26	27–57
550	1–6	7–14	15–20	21–24	25–52
600	1–6	7–13	14–18	19–22	23–48
750	1–4	5–10	11–15	16–18	19–40
900	1–4	5–9	10–13	14–15	16–34
1000	1–3	4–8	9–11	12–14	15–31
1100	1–3	4–7	8–10	11–13	14–28
1200	1–3	4–7	8–10	11–12	13–26
1500	1–2	3–5	6–8	9	10–21
1800	1–2	3–5	6–7	8	9–18
2000	1–2	3–4	5–6	7	8–16
2200	1	2–4	5	6–7	8–15
2500	1	2–3	4–5	6	7–14
2800	1	2–3	4	5	6–12
3000	1	2–3	4	5	6–12

Presetting	5.5 (yellow)	2.5 (white)	4.5 (red)	6 (black)	8 (blue)

HEAT FOR THE EYE: ARBONIA COLOURS.

Extract from the extensive colour range – additional colours on request

Standard

traffic white
AF RAL 9016

Arbonia special colour

bright silver
CF GLS

AF All-Finish RAL 9016

CF Color Finish
RAL classic or sanitary colours, selected DB and NCS colours, special colour bright silver

SF Super Finish
Further DB or NCS colours, colours of choice, Arbonia special colours

For production reasons, paint finishes on steel bases are subject to the slight colour variations that are common in the industry and caused in part by specific light conditions (especially in the case of metallic paint finishes).

There may also be differences when comparing lacquered steel surfaces (radiators) with lacquered ceramic products.

Because of the limitations of the printing process, the colour illustrations are not binding.

RAL

See RAL colour chart

Sanitary equipment

bahama
CF BAH

manhattan
CF MAN

jasmine
CF JAS

edelweiss
CF EWE

pergamon
CF PER

aegean
CF AEG

natura
CF NAT

calypso
CF CAL

greenwich
CF GRW

"New Inspirations"

Beyond the familiar, extensive colour spectrum, Arbonia is introducing 18 modern accents to the "Fresh", "Warm", and "Cool" categories with its original "New Inspirations" colour concept.

* fine structure **pearl glimmer

FRESH

BAMBOO
CF NIC F 004

SKY BLUE
CF NIC F 001**

PAPAYA
CF NIC F 005

DEEP OCEAN
CF NIC F 002**

CHERRY
CF NIC F 006

AMAZONAS
CF NIC F 003**

WARM

SUNNYDAY
CF NIC W 004*

IVORY
CF NIC W 001*

CHILI
CF NIC W 005*

CURRY
CF NIC W 002*

REED
CF NIC W 006*

sahara
CF NIC W 003*

COOL

IRON SF
CF NIC C 004**

SNOW
CF NIC C 001*

SLATE
CF NIC C 005*

ICE BLUE
CF NIC C 002*

ONYX
CF NIC C 006*

ARCTIC BLUE
CF NIC C 003**

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