



## TECHNICAL INFORMATION

<b>Material</b>	Standard:	steel tubes with air valve G 3/8" $\varnothing 32 \times 2,0 \times \varnothing 92$ mm, lead of spiral 10 mm $\varnothing 57 \times 2,5 \times \varnothing 137$ mm, lead of spiral 18 mm $\varnothing 76 \times 2,5 \times \varnothing 156$ mm, lead of spiral 20 mm width of steel fins 0,8mm
	Stainless steel, Hot-dip galvanized:	per order, see page 21
<b>Connection threads</b>	inner G1/2"	
<b>Lengths</b>	500 mm–6 000 mm (with step of 100 mm)	
<b>Operating conditions</b>	Hot water system:	forced circulation
	Max. operating temperature:	120 °C
	Operating overpressure:	1,0 MPa
	Test overpressure:	1,3 MPa
The radiator is designed for ambient temperature from 2 to 40 °C and relative humidity from 20 to 70 °C.		
<b>Colour</b>	snow white RAL 9016, white RAL 9010; colours based on the RAL colour card (extra charge)	
<b>Atypical design options</b>	Connection threads G3/4", G3/8", G1"	
	Lead of spiral from 10–30 mm (12–30 mm) with step 2 mm	
	Loose ends can also be used for gravity circulation. Everything based on the customer's approved technical documentation.	

## TABLE OF DIMENSIONS

RA1-F	Dimensions [mm]												
	A	B	C	D	E	F	G	H	I	J	K	L	M
$\varnothing 32 \times 2,0 \times \varnothing 92$ mm	500–6000	192	32	92	10	A-100	50	25	-	-	-	-	≥60
$\varnothing 57 \times 2,5 \times \varnothing 137$ mm	500–6000	237	57	137	18	A-140	70	35	-	-	-	-	≥85
$\varnothing 76 \times 2,5 \times \varnothing 156$ mm	500–6000	256	76	156	20	A-140	70	35	-	-	-	-	≥95

Note:  $\varnothing 32 \times 2,0 \times \varnothing 92$  [mm] – diameter of tube × thickness × diameter of winding [mm]

## HEATING OUTPUTS

RA1-F	TEMPERATURE GRADIENT	LENGTH [mm] / OUTPUT Q [W]								
		500	1000	1500	2000	2500	3000	4000	5000	6000
$\varnothing 32 \times 2,0 \times \varnothing 92$ mm	90/70/20 °C	203	501	799	1058	1318	1578	2095	2628	3161
	75/65/20 °C	160	395	630	835	1040	1245	1653	2073	2494
	70/55/20 °C	130	320	510	676	842	1008	1338	1679	2019
	55/45/20 °C	82	203	324	430	535	641	851	1067	1284
$\varnothing 57 \times 2,5 \times \varnothing 137$ mm	90/70/20 °C	266	559	911	1240	1568	1919	2612	3292	3906
	75/65/20 °C	210	441	719	978	1237	1514	2061	2597	3082
	70/55/20 °C	170	357	582	792	1001	1226	1668	2102	2495
	55/45/20 °C	108	227	370	503	637	779	1061	1337	1586
$\varnothing 76 \times 2,5 \times \varnothing 156$ mm	90/70/20 °C	294	587	939	1260	1636	2046	2721	3366	3991
	75/65/20 °C	232	463	741	994	1291	1614	2147	2656	3149
	70/55/20 °C	188	375	600	805	1045	1307	1738	2150	2549
	55/45/20 °C	119	238	381	512	665	831	1105	1367	1621

Note: Temperature exponent  $n=1,3$   
Hot-dip galvanized surface treatment reduces heating output by ~10 %, stainless steel by ~35 %.

## VOLUME OF WATER AND WEIGHT

RA1-F	Length X [mm]	500	1000	1500	2000	2500	3000	4000	5000	6000
$\varnothing 32 \times 2,0 \times \varnothing 92$ mm	Weight [kg]	2,3	5	7,8	10,5	13,2	15,9	18,6	21,3	24
	Volume [l]	0,3	0,7	1	1,3	1,6	1,9	2,5	3,1	3,7
$\varnothing 57 \times 2,5 \times \varnothing 137$ mm	Weight [kg]	4,6	9,1	13,7	18,2	22,7	27,2	31,7	40,7	49,6
	Volume [l]	1,1	2,1	3,1	4,1	5,1	6,2	8,2	10,3	12,3
$\varnothing 76 \times 2,5 \times \varnothing 156$ mm	Weight [kg]	5,4	10,7	16,1	21,5	26,9	32,3	37,7	46,7	56,9
	Volume [l]	2	3,9	5,8	7,7	9,7	11,6	15,4	19,3	23,1

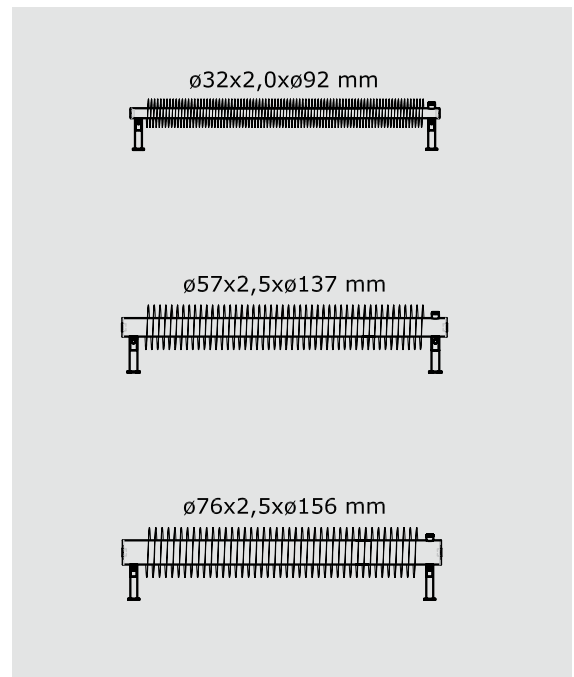
Note: Radiator weight without heating fluid

## CODE EXAMPLE

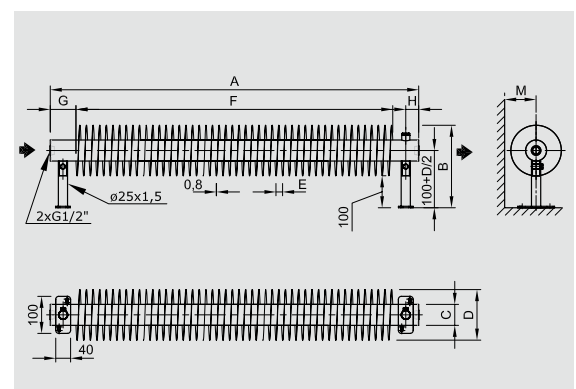
ZRA-1	57	137	100	F	01
SPIRAL type	$\varnothing$ tube [mm]	$\varnothing$ winding [mm]	length [cm]	on the floor	colour code

Ordering, see the page 22

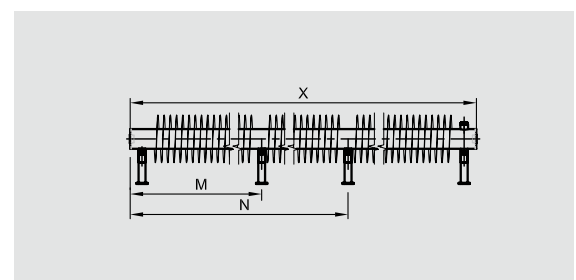
## BASIC TYPES



## SKETCH



## SUPPORTING ELEMENTS



### RA1-F ( $\varnothing 32$ mm)

length of spiral X [mm]	M	N	Number of legs
500–2900	0	0	2 pcs
2901–4500	X/2	0	3 pcs
4501–6000	1/3 X	2/3 X	4 pcs

### RA1-F ( $\varnothing 57$ mm a $\varnothing 76$ mm)

length of spiral X [mm]	M	N	Number of legs
500–3000	0	0	2 pcs
3001–4500	X/2	0	3 pcs
4501–6000	1/3 X	2/3 X	4 pcs