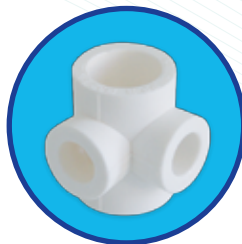




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Product Catalogue





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PP-R; Polypropylene Random Copolymer Type - 3

This material is a proven, high performance random copolymer that enables the production of top quality solutions for hot & cold water piping applications.

Thanks to its high exceptional heat stability, extraction resistance, stable processing characteristics, and ease of welding and installation, random copolymer enables pipes with reliable performance to be manufactured.

- Extremely long life at least 50 years
- Taste and odor neutral
- Excellent weld ability
- Good chemical resistance
- Bacteriologic ally neutral
- Physiologically harmless

Physical, Thermal and Mechanical Properties

Properties	Testing methods	Unit	Values
Physical properties			
Density at 23 °C	ISO 1183	g /cm ³	0.9
Melt flow index (MFI) 190 C°/ 5 kg	ISO 1133	g/10 min	<0.8
Melt flow index (MFI) 230 C°/ 2.16 kg	ISO 1133	g/10 min	<0,5
Linear expansion coefficient	DIN 8078	K ⁻¹	1.5 x 10 ⁻⁴
Heat conductivity	DIN 8078	WK-1m-1	0,23
Surface resistance	DIN 8078	Ω	>10 ¹²
Elasticity module	DIN 8078	N/mm ²	800
Thermal properties			
Melting point	DSC	C°	146–150
Subjective heat	Calorimeter	Kj/kgK	1.73
Coefficient of linear expansion	ASTM D 696	mm / m(C°)	0.15
Deflection temperature under load – 1.8Mpa	ISO 75A–1, -2	°C	46
VICAT softening point	ISO 306	°C	132
Mechanical properties			
Tensile stress at yield at 50 mm/min	ISO 527–1,-2	Mpa	25
Elongation at yield at 50 mm/min		%	%
Elongation at break at 50 mm/min		13	>500
Charpy impact strength (0 °C)	ISO 179	15J	<i>Fara rupere</i>

Long Service Life

With all water carrying pipes, resistance to internal pressure is an important factor affecting long life characteristic.

To assure optimal life performance, straight and curved pipes have been subjected to extensive hydrostatic pressure testing, in the laboratory, at a variety of temperatures.

Long-Lasting Performance

Random copolymer that is used for production of Berke pipes and fittings can withstand temperatures up to 70° C without losing shape, and handle short duration temperatures of up to 100° C. Combined with good chemical resistance and impact strength, Berke pipes can simply be installed and forgotten about for at least 50 years!

Particularly important for domestic water installations, is the fact that random copolymer type 3 is physiologically harmless, and taste and color neutral.

Excellent Stability

In use, the formulation of Berke pipes is such that it offers a high molecular weight, plus excellent mechanical properties. Additional benefits include high heat stability as well as excellent resistance to extraction.

Berke pipes and fittings conform to DIN 8077/78, EN ISO 15874 -1,2,3 and DIN 16962 standards.

Easy Installation, Cost-Effective in Use

Whatever the complexity of a domestic water installation, Berke pipes have the ability to be shaped to conform to even most complex layouts.

Berke pipes easy weld ability also makes them faster and simpler to install.

Measuring Hydrostatic Pressure Performance

Hydrostatic pressure is calculated according to the below formula:

$$P = \frac{2 \times e_{\min} \times \sigma}{d_{em} - e_{\min}}$$

P = internal pressure ,MPa
 d_{em} = outside diameter of the pipe, mm
 e_{\min} = minimum wall thickness of the pipe, mm
 σ = hydrostatic stress, MPa
 1 Mpa = 10 bar

Service life DIN 8077 (SF=1.S PP-R)

Temperature °C	Services Life	Pipe Series (S) - Standart Dimension Rate (SDR)							
		5	11	3.2	7.4	2.5	6	2	5
		PN 10		PN 16		PN 20		PN 25	
Pressure (bar)									
20	1	15.0		23.7		29.9		37.7	
	5	14.1		22.3		28.1		35.4	
	10	13.7		21.7		27.4		34.5	
	25	13.2		21.0		26.4		33.3	
	50	12.9		20.4		25.7		32.4	
40	1	10.8		17.1		21.6		27.2	
	5	10.1		16.0		20.2		25.4	
	10	9.8		15.5		19.6		24.7	
	25	9.4		15.0		18.8		23.7	
	50	9.2		14.5		18.3		23.1	
60	1	7.7		12.2		15.4		19.4	
	5	7.1		11.3		14.3		18.0	
	10	6.9		11.0		13.9		17.5	
	25	6.6		10.5		13.3		16.7	
	50	6.4		10.2		12.9		16.2	
70	1	6.5		10.3		12.9		16.3	
	5	6.0		9.5		12.0		15.1	
	10	5.8		9.2		11.6		14.6	
	25	5.0		8.0		10.0		12.7	
	50	4.2		6.7		8.5		10.7	
80	1	5.4		8.6		10.8		13.7	
	5	4.8		7.6		9.6		12.1	
	10	4.0		6.4		8.1		10.2	
	25	3.2		5.1		6.5		8.1	
95	1	3.8		6.1		7.6		9.6	
	5	2.6		4.1		5.2		6.5	

Standards And Guidelines

DIN 8077	Polypropylene (PP) pipes. PP-H. PP-B. PP-R. PP-RCT dimensions.
DIN 8078	Polypropylene (PP) pipes. PP-H. PP-B. PP-R. PP-RCT general quality requirements and testing
DIN 16962	Pipe fittings and joint assemblies for polypropylene (PP) pressure pipes. Part 5- General Quality Requirements and Testing. Part 6- Injection Molded Elbows for socket-welding Dimension. Part 9 Injection Molded reducers and nipples for socket welding Dimension.
DIN 1988	Drinking water supply systems- Part 1 General, Part 2 Materials, components, appliances, design and installation.
ISO 3213	Polypropylene (PP) pipes effect of time and temperature on the expected strength.
ISO 10508	Plastics piping systems for hot and cold water installations -- Guidance dor classification and design.
EN ISO 15874	Plastic piping systems for hot and cold water installations polypropylene (PP) Part 1 - general, Part 2 -pipe, Part 3 - fittings, Part 5 - fitness for purpose of the system, Part 7 -guidance for the assessment of conformity
DVGW544	Plastic pipes in the drinking water installation; Requirements and testing
DVS 2207	Welding of thermoplastics materials heated tool welding of piping system and sheet of PP.

Metal Component Compatibility

As with all polypropylenes prolonged exposure to copper can cause damage to the properties of random copolymer Type-3.

Where metal inserts are to be used in an installation the recommended choice is nickel or chromiumplated brass components in order not to harm raw material properties. All the metal inserts that are used in production of Berke metal fittings are nickel or chromium-plated brass components that does not harm the raw material.

Chemical Resistance

As with all PP pipes it is advisable that substances such as oils, waxes and bitumen should be kept away from the pipes.

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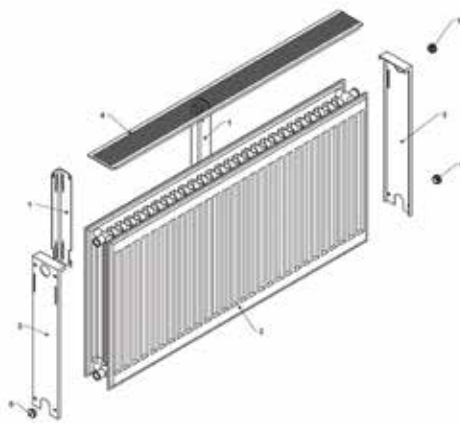


berkepla



TECHNICAL SPECIFICATIONS

KALDE steel panel radiators are produced with fully integrated and fully automated lines under PLC supervision which use latest technologies in compliance with BS, DIN EN 442 norms. The radiators come in two different heights (500 mm, 600 mm) and 27 different lengths (from 400 mm to 3,000 mm increasing by 100 mm). They are produced with German made presses and moulding equipment specially designed for panel radiator. To provide maximum heat output capacity, we use high quality steel sheets produced specifically for panel radiator and wide surface convectors, and raw materials that comply with EN norms.



Both the radiator's inner and outer surfaces are fully cleaned and purified by dipping, spray oil taking, phosphatizing and passivation conforming to DIN 55900. As a result, the whole surface of the radiator is totally purified from any chemical substances that might effect the quality of the paint. A premier coating is applied by dipping. The radiators then pass through a furnace, and are painted in climatized cabinets by robotic pistols with electrostatic powder paint and are furnace again.

Thickness of the panel steel sheet	: 1,11 ± 0,09 mm
Thickness of the convector steel sheet	: 0,30 ± 0,09 mm
Thickness of the grill and side cover steel sheet	: 0,50 ± 0,09 mm
Maximum working temperature	: 120 °C
Maximum working pressure	: 10 Bars
Test pressure	: 13 Bars

DIMENSIONS

Standart heights are: (H) 500 mm and 600 mm

Standart lengths are: (L) From 400 to 3,000 mm in 100 mm increments

Produced with fully automated Italian robot welding machinery, each radiator is tested fully under 13 bars.

Height	Axis Distance	Width	Weight	Water Content
(H) mm	(A) mm	(a) mm	Kg/m	Mt/Lt
500	450	104	24,53	4,82
600	550	104	29,26	5,66

TYPE

Type 22 is connected from the holes to the installation system using T type welded connection parts. T parts enable the radiator to be connected to different shapes. This provides the flexibility to connect the radiator to different installation systems under different positions.

PACKING AND ASSEMBLY

The radiators have side covers and top grills which can be easily mounted to the body. They are protected from outer impacts by cardboard carton and plastic cover for hangers, and are also wrapped in nylon against dust and humidity. Inside the radiator, you will find a full assembly set including purjor plug, blind plug, screws, dubels, suspension brace clamp for easy installation. Our packaging system with added protection also enables the radiators to be assembled to the wall while the packaging is still on the radiator giving protection against dust, external effects and other impacts during the construction phase of the house.

Radiator Length	Type 11-21-22-33	Radiator Length	Type 11-21-22-33	
mm	L3 (mm)	mm	L1 (mm)	L2 (mm)
400	200	1700	766,5	733,5
500	300	1800	800	800
600	400	1900	866,5	833,5
700	500	2000	900	900
800	600	2100	966,5	933,5
900	700	2200	1000	1000
1000	800	2300	1066,5	1033,5
1100	900	2400	1100	1100
1200	1000	2500	1166,5	1133,5
1300	1100	2600	1200	1200
1400	1200	2700	1266,5	1233,5
1500	1300	2800	1300	1300
1600	1400	2900	1366,5	1333,5
		3000	1400	1400

Radiator Height	B	C
Mm	mm	Mm
500	285	107,5
600	385	107,5
Type 11-21-22-33	A (mm)	
	100	

ASSEMBLY

STEP 1

Carefully take out the set inside the pe bag in order not to scratch the radiator. Check contents of the bag. If there is any missing item, please obtain it before starting the installation.

STEP 2

Place the inner and outer surfaces of the radiator according to the installation connections. Mark the location of the radiator on the wall leaving spaces on the bottom, top, left and right sides of the radiator. You will also need some space to install the valves both on the right and left sides of the radiator.

STEP 3

Mark the wall 107.5 mm below the bottom edge of the radiator on suspension brace clamp axis.

STEP 4

The suspension brace clamp can be mounted on the wall so that either the wide or the narrow part can be on the wall.

STEP 5

You can use the suspension brace clamp as a guide. Place lower edge to match point A showing upwards and the clamp holes to center the axis line to make it vertical to the floor. Use a water gauge during this process.

STEP 6

Mark the wall where the suspension brace clamps will be screwed to the wall.

STEP 7

Use the values on page 5 (L1, L2, or L3) to mark the location where the suspension brace clamp axis should be. Again use the suspension brace clamps as a template to mark the locations to be drilled in.

STEP 8

Using a suitable drill make the holes in the wall and place the dubels inside the holes.

STEP 9

Place the suspension brace clamps on the wall taking care of the position of the narrow/wide sides. Use the screws to firmly mount the first clamp to the wall. Use a water gauge to make sure that the clamps are located parallel to each other and then mount the other clamp to the wall.

STEP 10

Hang the radiator on the suspension brace clamps

STEP 11

Unplug the plastic on the side (right or left) where the water is flowing. Fasten the valve to the top hole and the blind plug to the bottom hole.

STEP 12

Then unplug the other plastic on the top and replace it with the purjor plug, and fasten the valve to the bottom hole. Now, the radiator is ready to be connected to the system. You can make the connections.

STEP 13

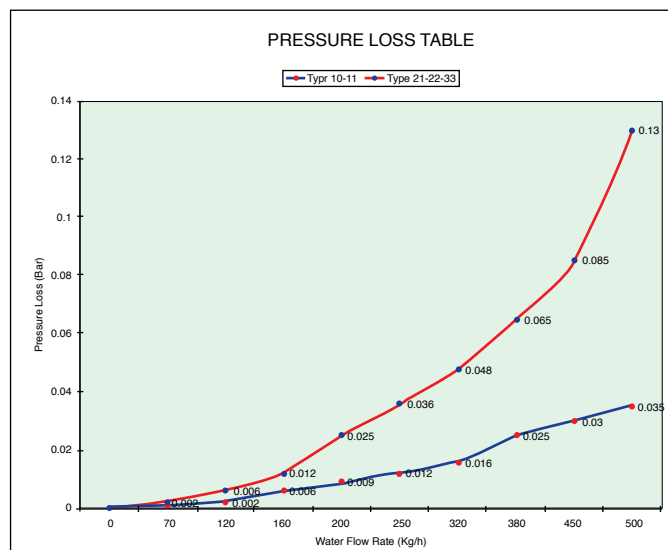
Do not use the radiator before filling water into the system and controlling if there is any leakage.

RADIATOR CHOICE CALCULATIONS

In order to get the biggest efficiency from the radiator, you should choose the appropriate one for your needs. While making your choice, you need to calculate the capacity changes according to the pressure losses, different water in and out conditions, and the room temperatures. Below you can find some samples for these choices.

PRESSURE LOSS

Due to the friction inside the system, a pressure loss will occur. This is important for the choice of the pump. Most of the pressure loss happens inside the radiator. You can calculate the pressure loss in the radiators using the below chart.



Example: What is the pressure loss on a 600/22DPDC/1000 radiator?

$Q_n = 1808$ watt = for one radiator of size 600/22DPDC/1000; it is 1554 kcal/h (1 watt = 0,86 kcal/h)

Water flow percentage = $Q_{rv} / (\text{water temperature in} - \text{water temperature out})$

Water flow percentage = $1554 / (75 - 65)$ Water flow percentage = 155,4 kg/h

You can use the chart to calculate the pressure loss as below.

-On type 22 line; draw a vertical line from x-axis to meet water flow

-Then draw a horizontal line from y-axis;

-Where the lines meet is the value of the pressure loss for type 22 x 600 x 1000. For this example, the value of the pressure loss is 0,002 bars.

Generally speaking, pressure loss depends on the water flow and the radiator's type and dimensions. It is more critical for longer radiators.

EXAMPLE 1

If heat output value for (75/65) 20 °C room temperature is 1808 watts, what will be the heat output for a room of 18 °C and 70/55°C In Table 3 (showing F Factor), in the first vertical column you can see the water temperature and in the second vertical column you can see the room temperature. In the horizontal column you can see the temperature of the water out from the radiator. Where these columns meet, you can find the F value. F value is 1,17 for the values of 70/55 °C and 18 °C.

New heat output value is calculated with the below formula: $Q=Q_n/F$

$$Q = 1808/1.17 = 1,545 \text{ watts}$$

Q = Needed heat output

Q_n = Standard heat output

F = Capacity factor in the Table 3

EXAMPLE 2

This calculation is used to choose a radiator for a room or a space.

Let's assume that heat needed for a room is Q=1,700 watts. How can we calculate the heat output of a radiator on 18°C and 70/55°C And how can we choose a radiator?

From Table 2, F value is 1.17

$$Q_n=Q \times F \quad Q_n=1,700 \times 1.17 \quad Q_n=1,989 \text{ watts}$$

So, we choose a radiator of Q_n=1,989 watts (according to 75/65 °C and room temperature 20 °C) we can choose these radiators: DPDC 500x1400mm or 600x1200mm.

If we do not apply this condition and choose a radiator of 1,700 watts instead of 1,989 watts, then the room temperature will never come to requested levels.

HEAT OUTPUT TABLE (90 "C / 70 "C) WATER TEMPERATURE									
Height		500				600			
Room Temp. °C		PC	DPSC	DPDC	TPTC	PC	DPSC	DPDC	TPTC
12 °C	Watt/mt	598	868	1211	1585	717	1036	1414	1895
	Kcal/mt	514	747	1042	1363	616	891	1216	1630
15 °C	Watt/mt	642	933	1302	1704	770	1114	1519	2037
	Kcal/mt	552	802	1120	1465	663	958	1307	1752
18 °C	Watt/mt	678	985	1374	1798	813	1176	1604	2150
	Kcal/mt	583	847	1182	1546	699	1011	1379	1849
20 °C	Watt/mt	892	1296	1808	2366	1070	1547	2110	2829
	Kcal/mt	767	1114	1555	2035	920	1330	1815	2433
22 °C	Watt/mt	740	1076	1501	1964	888	1284	1751	2348
	Kcal/mt	637	925	1291	1689	764	1104	1506	2019
24 °C	Watt/mt	767	1115	1555	2035	920	1330	1815	2433
	Kcal/mt	660	959	1337	1750	791	1144	1561	2092

HEAT INPUT / OUTPUT (Watt)

20°C		TYPE 11		TYPE 21		TYPE22		TYPE 33	
L (mm)	t1/ t2 (°C)	H (mm)		H (mm)		H (mm)		H (mm)	
		500	600	500	500	500	600	500	600
400	90 / 70	357	428	518	619	723	844	946	1132
	75 / 65	281	336	408	487	578	675	743	885
	70 / 55	244	293	356	424	463	540	646	768
	55 / 45	143	171	209	249	291	339	377	445
500	90 / 70	446	535	648	773	904	1055	1183	1415
	75 / 65	351	421	510	608	723	844	928	1107
	70 / 55	305	366	445	530	578	675	807	961
	55 / 45	179	214	261	311	363	424	471	557
600	90 / 70	535	642	778	928	1085	1266	1419	1697
	75 / 65	421	505	612	730	868	1013	1114	1328
	70 / 55	366	439	533	636	694	810	968	1153
	55 / 45	215	257	314	373	436	509	565	668
700	90 / 70	624	749	907	1083	1265	1477	1656	1980
	75 / 65	491	589	714	852	1012	1182	1300	1550
	70 / 55	428	512	622	742	810	945	1130	1345
	55 / 45	251	300	366	435	509	594	659	779
800	90 / 70	713	856	1037	1237	1446	1688	1893	2263
	75 / 65	561	673	817	973	1157	1350	1485	1771
	70 / 55	489	565	711	847	925	1080	1291	1537
	55 / 45	287	342	418	497	581	679	753	891
900	90 / 70	803	963	1166	1392	1627	1899	2129	2546
	75 / 65	631	757	919	1095	1301	1519	1671	1992
	70 / 55	550	659	800	953	1041	1215	1453	1729
	55 / 45	322	385	471	559	654	763	847	1002
1000	90 / 70	892	1070	1296	1547	1808	2110	2366	2829
	75 / 65	701	841	1021	1217	1446	1688	1856	2214
	70 / 55	611	732	889	1059	1157	1350	1614	1921
	55 / 45	358	428	523	621	727	848	942	1113
1100	90 / 70	981	1177	1426	1701	1988	2321	2602	3112
	75 / 65	772	925	1123	1338	1591	1857	2042	2435
	70 / 55	672	805	978	1165	1272	1485	1775	2113
	55 / 45	394	471	575	684	799	933	1036	1225
1200	90 / 70	1070	1284	1555	1856	2169	2532	2839	3395
	75 / 65	842	1009	1225	1460	1735	2026	2228	2656
	70 / 55	733	878	1067	1271	1388	1620	1937	2305
	55 / 45	430	514	627	746	872	1018	1130	1336

HEAT INPUT / OUTPUT (Watt)									
20°C		TYPE 11		TYPE 21		TYPE22		TYPE 33	
L (mm)	t1/t2 (°C)	H (mm)		H (mm)		H (mm)		H (mm)	
		500	600	500	500	500	600	500	600
1400	90 / 70	1248	1499	1814	2165	2531	2954	3312	3961
	75 / 65	982	1177	1429	1704	2024	2363	2599	3099
	70 / 55	855	1024	1245	1483	1620	1891	2260	2690
	55 / 45	502	599	732	870	1017	1188	1318	1559
1600	90 / 70	1427	1713	2074	2475	2892	3376	3785	4527
	75 / 65	1122	1346	1633	1947	2314	2701	2970	3542
	70 / 55	977	1171	1423	1695	1851	2161	2582	3074
	55 / 45	573	685	836	994	1163	1357	1507	1781
1800	90 / 70	1605	1927	2333	2784	3254	3798	4258	5092
	75 / 65	1263	1514	1837	2190	2603	3038	3342	3984
	70 / 55	1099	1317	1600	1907	2082	2431	2905	3458
	55 / 45	645	770	941	1119	1308	1527	1695	2004
2000	90 / 70	1783	2141	2592	3093	3615	4220	4731	5658
	75 / 65	1403	1682	2041	2434	2892	3376	3713	4427
	70 / 55	1221	1463	1778	2119	2314	2701	3228	3842
	55 / 45	717	856	1046	1243	1453	1696	1883	2226
2200	90 / 70	1962	2355	2851	3403	3977	4642	5204	6224
	75 / 65	1543	1850	2245	2677	3181	3714	4084	4870
	70 / 55	1344	1610	1956	2331	2545	2971	3551	4226
	55 / 45	788	941	1150	1367	1599	1866	2071	2449
2400	90 / 70	2140	2569	3110	3712	4338	5064	5678	6790
	75 / 65	1852	2220	2695	3212	3817	4052	4901	5844
	70 / 55	1612	1932	2347	2797	3054	3565	4261	5072
	55 / 45	946	1130	1380	1640	1918	2239	2486	2939
2600	90 / 70	2318	2783	3369	4021	4700	5486	6151	7356
	75 / 65	1824	2187	2654	3164	3760	4389	4827	5755
	70 / 55	1588	1902	2312	2754	3008	3511	4196	4995
	55 / 45	931	1113	1359	1616	1889	2205	2448	2894
2800	90 / 70	2497	2997	3629	4331	5061	5908	6624	7921
	75 / 65	1964	2355	2858	3407	4049	4726	5198	6198
	70 / 55	1710	2049	2490	2966	3239	3781	4519	5379
	55 / 45	1003	1198	1464	1740	2035	2375	2636	3117
3000	90 / 70	2675	3211	3888	4640	5423	6330	7097	8487
	75 / 65	2104	2523	3062	3.650	4338	5064	5569	6641
	70 / 55	1832	2195	2667	3178	3470	4051	4842	5763
	55 / 45	1075	1284	1568	1864	2180	2545	2825	3340

ENTRANCE WATER TEMPERATURE t1 (°C)	EXIT WATER TEMPERATURE t2 (°C)	F FACTOR VALUES						
		10 °C	12 °C	15 °C	18 °C	20 °C	22 °C	24 °C
95	80	0.57	0.59	0.62	0.65	0.68	0.70	0.73
	70	0.62	0.65	0.68	0.73	0.76	0.79	0.83
	60	0.69	0.72	0.77	0.83	0.87	0.91	0.96
	50	0.79	0.83	0.89	0.96	1.02	1.08	1.15
90	80	0.59	0.61	0.64	0.68	0.71	0.74	0.77
	75	0.62	0.64	0.68	0.72	0.75	0.78	0.82
	70	0.65	0.67	0.72	0.76	0.80	0.83	0.87
	65	0.68	0.71	0.76	0.81	0.85	0.89	0.93
	60	0.72	0.76	0.81	0.87	0.91	0.96	1.01
	55	0.77	0.81	0.87	0.93	0.98	1.04	1.10
	50	0.83	0.87	0.93	1.01	1.07	1.14	1.21
85	75	0.64	0.67	0.71	0.75	0.79	0.82	0.86
	70	0.68	0.70	0.75	0.80	0.84	0.88	0.92
	65	0.72	0.75	0.80	0.85	0.89	0.94	0.99
	60	0.76	0.79	0.85	0.91	0.96	1.01	1.07
	55	0.81	0.85	0.91	0.98	1.04	1.10	1.16
80	70	0.71	0.74	0.79	0.84	0.88	0.93	0.97
	65	0.75	0.78	0.84	0.90	0.94	0.99	1.05
	60	0.80	0.83	0.89	0.96	1.01	1.07	1.13
	55	0.85	0.89	0.96	1.04	1.10	1.16	1.24
	50	0.91	0.96	1.04	1.13	1.20	1.28	1.37
75	65	0.79	0.82	0.88	0.95	1.00	1.05	1.12
	60	0.84	0.88	0.94	1.02	1.08	1.14	1.21
	55	0.89	0.94	1.01	1.10	1.17	1.24	1.32
	50	0.96	1.01	1.10	1.20	1.28	1.37	1.47
70	60	0.88	0.93	1.00	1.08	1.15	1.22	1.30
	55	0.94	0.99	1.08	1.17	1.25	1.33	1.42
	50	1.01	1.07	1.17	1.28	1.37	1.47	1.58
	45	1.10	1.16	1.28	1.42	1.52	1.64	1.79
65	55	1.00	1.05	1.15	1.26	1.34	1.43	1.54
	50	1.08	1.14	1.25	1.37	1.47	1.59	1.71
	45	1.17	1.24	1.37	1.52	1.64	1.78	1.94
	40	1.28	1.37	1.52	1.71	1.87	2.05	2.27
55	50	1.23	1.31	1.45	1.62	1.75	1.90	2.07
	45	1.34	1.43	1.60	1.80	1.96	2.15	2.37
	40	1.47	1.59	1.78	2.03	2.24	2.48	2.78
	35	1.64	1.78	2.03	2.36	2.64	2.99	3.43

ENTRANCE WATER TEMPERATURE t1 (°C)	EXIT WATER TEMPERATURE t2 (°C)	F FACTOR VALUES						
		10 °C	12 °C	15 °C	18 °C	20 °C	22 °C	24 °C
50	45	1.45	1.56	1.75	1.98	2.17	2.40	2.67
	40	1.6	1.73	1.96	2.25	2.50	2.79	3.15
	35	1.78	1.94	2.24	2.63	2.96	3.38	3.92
	30	2.03	2.24	2.64	3.20	3.70	4.39	5.39
45	40	1.75	1.90	2.17	2.53	2.83	3.19	3.66
	35	1.96	2.15	2.50	2.96	3.37	3.89	4.58
	30	2.24	2.48	2.96	3.63	4.25	5.11	6.38
40	35	2.17	2.40	2.83	3.41	3.93	4.62	5.54
	30	2.50	2.79	3.37	4.21	5.01	6.14	7.87



STEEL PANEL RADIATOR TYP 22/DPDC

Code	d(mm)	Package Standart
4075.22.300400	22x300x400	1
4075.22.300500	22x300x500	1
4075.22.300600	22x300x600	1
4075.22.300700	22x300x700	1
4075.22.300800	22x300x800	1
4075.22.300900	22x300x900	1
4075.22.301000	22x300x1000	1
4075.22.301100	22x300x1100	1
4075.22.301200	22x300x1200	1
4075.22.301300	22x300x1300	1
4075.22.301400	22x300x1400	1
4075.22.301500	22x300x1500	1
4075.22.301600	22x300x1600	1
4075.22.301700	22x300x1700	1
4075.22.301800	22x300x1800	1
4075.22.301900	22x300x1900	1
4075.22.302000	22x300x2000	1
4075.22.302100	22x300x2100	1
4075.22.302200	22x300x2200	1
4075.22.302300	22x300x2300	1
4075.22.302400	22x300x2400	1
4075.22.302500	22x300x2500	1
4075.22.302600	22x300x2600	1
4075.22.302700	22x300x2700	1
4075.22.302800	22x300x2800	1
4075.22.302900	22x300x2900	1
4075.22.303000	22x300x3000	1



STEEL PANEL RADIATOR TYP 22/DPDC

Code	d(mm)	Package Standart
4075.22.400400	22x400x400	1
4075.22.400500	22x400x500	1
4075.22.400600	22x400x600	1
4075.22.400700	22x400x700	1
4075.22.400800	22x400x800	1
4075.22.400900	22x400x900	1
4075.22.401000	22x400x1000	1
4075.22.401100	22x400x1100	1
4075.22.401200	22x400x1200	1
4075.22.401300	22x400x1300	1
4075.22.401400	22x400x1400	1
4075.22.401500	22x400x1500	1
4075.22.401600	22x400x1600	1
4075.22.401700	22x400x1700	1
4075.22.401800	22x400x1800	1
4075.22.401900	22x400x1900	1
4075.22.402000	22x400x2000	1
4075.22.402100	22x400x2100	1
4075.22.402200	22x400x2200	1
4075.22.402300	22x400x2300	1
4075.22.402400	22x400x2400	1
4075.22.402500	22x400x2500	1
4075.22.402600	22x400x2600	1
4075.22.402700	22x400x2700	1
4075.22.402800	22x400x2800	1
4075.22.402900	22x400x2900	1
4075.22.403000	22x400x3000	1



STEEL PANEL RADIATOR TYP 22/DPDC

Code	d(mm)	Package Standart
4075.22.500400	22x500x400	1
4075.22.500500	22x500x500	1
4075.22.500600	22x500x600	1
4075.22.500700	22x500x700	1
4075.22.500800	22x500x800	1
4075.22.500900	22x500x900	1
4075.22.501000	22x500x1000	1
4075.22.501100	22x500x1100	1
4075.22.501200	22x500x1200	1
4075.22.501300	22x500x1300	1
4075.22.501400	22x500x1400	1
4075.22.501500	22x500x1500	1
4075.22.501600	22x500x1600	1
4075.22.501700	22x500x1700	1
4075.22.501800	22x500x1800	1
4075.22.501900	22x500x1900	1
4075.22.502000	22x500x2000	1
4075.22.502100	22x500x2100	1
4075.22.502200	22x500x2200	1
4075.22.502300	22x500x2300	1
4075.22.502400	22x500x2400	1
4075.22.502500	22x500x2500	1
4075.22.502600	22x500x2600	1
4075.22.502700	22x500x2700	1
4075.22.502800	22x500x2800	1
4075.22.502900	22x500x2900	1
4075.22.503000	22x500x3000	1


STEEL PANEL RADIATOR TYP 22/DPDC

Code	d(mm)	Package Standart
4075.22.600400	22x600x400	1
4075.22.600500	22x600x500	1
4075.22.600600	22x600x600	1
4075.22.600700	22x600x700	1
4075.22.600800	22x600x800	1
4075.22.600900	22x600x900	1
4075.22.601000	22x600x1000	1
4075.22.601100	22x600x1100	1
4075.22.601200	22x600x1200	1
4075.22.601300	22x600x1300	1
4075.22.601400	22x600x1400	1
4075.22.601500	22x600x1500	1
4075.22.601600	22x600x1600	1
4075.22.601700	22x600x1700	1
4075.22.601800	22x600x1800	1
4075.22.601900	22x600x1900	1
4075.22.602000	22x600x2000	1
4075.22.602100	22x600x2100	1
4075.22.602200	22x600x2200	1
4075.22.602300	22x600x2300	1
4075.22.602400	22x600x2400	1
4075.22.602500	22x600x2500	1
4075.22.602600	22x600x2600	1
4075.22.602700	22x600x2700	1
4075.22.602800	22x600x2800	1
4075.22.602900	22x600x2900	1
4075.22.603000	22x600x3000	1





STEEL PANEL RADIATOR TYP 22/DPDC

Code	d(mm)	Package Standart
4075.22.700400	22x700x400	1
4075.22.700500	22x700x500	1
4075.22.700600	22x700x600	1
4075.22.700700	22x700x700	1
4075.22.700800	22x700x800	1
4075.22.700900	22x700x900	1
4075.22.701000	22x700x1000	1
4075.22.701100	22x700x1100	1
4075.22.701200	22x700x1200	1
4075.22.701300	22x700x1300	1
4075.22.701400	22x700x1400	1
4075.22.701500	22x700x1500	1
4075.22.701600	22x700x1600	1
4075.22.701700	22x700x1700	1
4075.22.701800	22x700x1800	1
4075.22.701900	22x700x1900	1
4075.22.702000	22x700x2000	1
4075.22.702100	22x700x2100	1
4075.22.702200	22x700x2200	1
4075.22.702300	22x700x2300	1
4075.22.702400	22x700x2400	1
4075.22.702500	22x700x2500	1
4075.22.702600	22x700x2600	1
4075.22.702700	22x700x2700	1
4075.22.702800	22x700x2800	1
4075.22.702900	22x700x2900	1
4075.22.703000	22x700x3000	1



STEEL PANEL RADIATOR TYP 22/DPDC

Code	d(mm)	Package Standart
4075.22.900400	22x900x400	1
4075.22.900500	22x900x500	1
4075.22.900600	22x900x600	1
4075.22.900700	22x900x700	1
4075.22.900800	22x900x800	1
4075.22.900900	22x900x900	1
4075.22.901000	22x900x1000	1
4075.22.901100	22x900x1100	1
4075.22.901200	22x900x1200	1
4075.22.901300	22x900x1300	1
4075.22.901400	22x900x1400	1
4075.22.901500	22x900x1500	1
4075.22.901600	22x900x1600	1
4075.22.901700	22x900x1700	1
4075.22.901800	22x900x1800	1
4075.22.901900	22x900x1900	1
4075.22.902000	22x900x2000	1
4075.22.902100	22x900x2100	1
4075.22.902200	22x900x2200	1
4075.22.902300	22x900x2300	1
4075.22.902400	22x900x2400	1
4075.22.902500	22x900x2500	1
4075.22.902600	22x900x2600	1
4075.22.902700	22x900x2700	1
4075.22.902800	22x900x2800	1
4075.22.902900	22x900x2900	1
4075.22.903000	22x900x3000	1





