



## Description

The model **RADIK LINE PREMIUM** is a vertically aligned radiator **with a flat front panel with fine vertical grooves**. The dimensions of this model make it ideal for use in tight or atypical rooms. Its design enables it **to be connected primarily from the middle bottom or side bottom** to a pressurised heating system. Alternatively, you can also use its top middle and top side connections. There are no hangers welded on the back side therefore the radiator is supplied with special brackets, guaranteeing an easy, fast and safe mounting. All radiator types are fitted with side covers. To select the mounting brackets, use the table on [page 41](#).

For the middle bottom connection to the heating system, we recommend using the integrated HM valve, supplied with a thermostatic head.

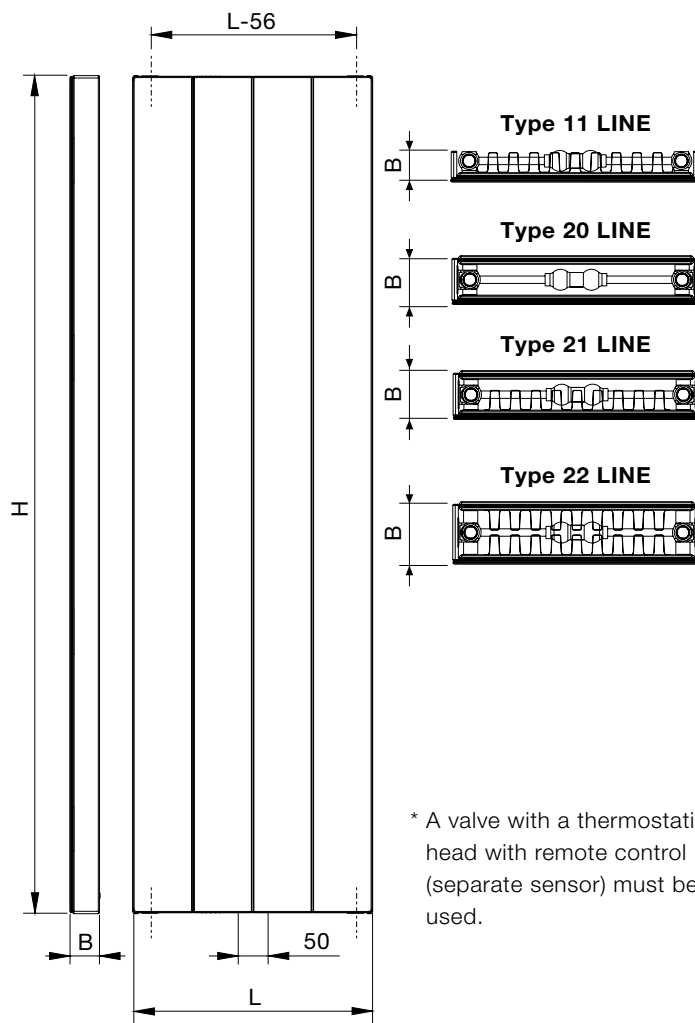


For the alternative top connection, a valve with a thermostatic head with remote control (separate sensor) must be used so that the thermostatic head is not directly influenced by the radiator.

## Technical data

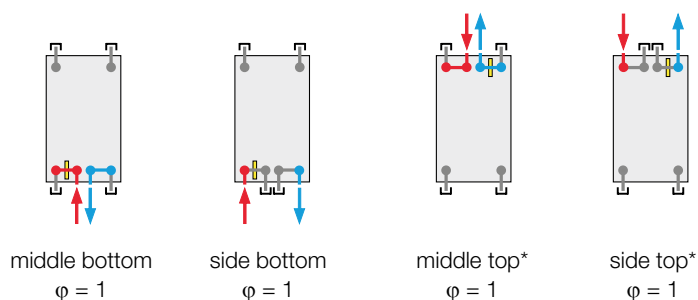
|                                            |                                                  |
|--------------------------------------------|--------------------------------------------------|
| <b>Height H</b>                            | 1600, 1800, 2000, 2200 mm                        |
| <b>Length L</b>                            | 400, 500, 600, 700 mm                            |
| <b>Depth B</b>                             |                                                  |
| Type 11 LINE                               | 49 mm                                            |
| Type 20 LINE                               | 79 mm                                            |
| Type 21 LINE                               | 79 mm                                            |
| Type 22 LINE                               | 102 mm                                           |
| <b>Connecting pitch</b>                    | 50 mm                                            |
| <b>Connecting thread</b>                   | 6 × G 1/2" inside                                |
| <b>Highest allowed working pressure</b>    | 1,0 MPa                                          |
| <b>Highest allowed working temperature</b> | 110 °C                                           |
| <b>Radiator connection</b>                 | middle bottom, side bottom, middle top, side top |
| <b>Resistance coefficient</b>              |                                                  |
| Type 11                                    | $\xi_T = 8$                                      |
| Type 20, 21, 22                            | $\xi_T = 12$                                     |

## Overview of types



\* A valve with a thermostatic head with remote control (separate sensor) must be used.

## Examples of connection to the heating system



☞ Heat output on [page 70](#).

☞ Ordering details are provided on [page 98](#).

# RADIK PLAN/LINE PREMIUM

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

| 20 °C            |                                        | Type 11 PLAN<br>Type 11 LINE |      |      |      | Type 20 PLAN<br>Type 20 LINE |      |      |      | Type 21 PLAN<br>Type 21 LINE |      |      |      | Type 22 PLAN<br>Type 22 LINE |      |      |      |
|------------------|----------------------------------------|------------------------------|------|------|------|------------------------------|------|------|------|------------------------------|------|------|------|------------------------------|------|------|------|
| Length L<br>[mm] | t <sub>1</sub> /t <sub>2</sub><br>[°C] | Height H [mm]                |      |      |      |                              |      |      |      |                              |      |      |      |                              |      |      |      |
|                  |                                        | 1600                         | 1800 | 2000 | 2200 | 1600                         | 1800 | 2000 | 2200 | 1600                         | 1800 | 2000 | 2200 | 1600                         | 1800 | 2000 | 2200 |
| 400              | 75/65                                  | 795                          | 867  | 935  | 999  | 974                          | 1064 | 1147 | 1224 | 1128                         | 1231 | 1322 | 1401 | 1343                         | 1477 | 1605 | 1728 |
|                  | 70/55                                  | 643                          | 702  | 757  | 811  | 787                          | 861  | 930  | 995  | 911                          | 995  | 1070 | 1134 | 1082                         | 1189 | 1292 | 1393 |
|                  | 55/45                                  | 408                          | 446  | 482  | 519  | 498                          | 547  | 592  | 638  | 576                          | 630  | 679  | 721  | 680                          | 747  | 811  | 878  |
|                  | 45/40                                  | 281                          | 307  | 332  | 359  | 341                          | 376  | 408  | 442  | 394                          | 432  | 467  | 496  | 464                          | 509  | 553  | 600  |
| 500              | 75/65                                  | 994                          | 1084 | 1169 | 1249 | 1218                         | 1330 | 1434 | 1530 | 1410                         | 1539 | 1653 | 1752 | 1679                         | 1846 | 2006 | 2160 |
|                  | 70/55                                  | 804                          | 877  | 947  | 1014 | 983                          | 1076 | 1162 | 1244 | 1138                         | 1244 | 1337 | 1418 | 1352                         | 1486 | 1615 | 1742 |
|                  | 55/45                                  | 510                          | 558  | 603  | 649  | 622                          | 683  | 741  | 798  | 720                          | 788  | 849  | 901  | 851                          | 934  | 1014 | 1098 |
|                  | 45/40                                  | 351                          | 384  | 416  | 448  | 427                          | 470  | 510  | 553  | 493                          | 541  | 584  | 620  | 580                          | 637  | 691  | 750  |
| 600              | 75/65                                  | 1192                         | 1300 | 1402 | 1499 | 1461                         | 1596 | 1721 | 1836 | 1692                         | 1847 | 1983 | 2102 | 2015                         | 2215 | 2407 | 2592 |
|                  | 70/55                                  | 964                          | 1053 | 1136 | 1217 | 1180                         | 1291 | 1395 | 1492 | 1366                         | 1493 | 1604 | 1701 | 1623                         | 1784 | 1938 | 2090 |
|                  | 55/45                                  | 612                          | 669  | 724  | 778  | 747                          | 820  | 889  | 957  | 863                          | 946  | 1019 | 1081 | 1021                         | 1121 | 1217 | 1317 |
|                  | 45/40                                  | 421                          | 460  | 498  | 538  | 512                          | 564  | 613  | 663  | 591                          | 649  | 701  | 744  | 696                          | 764  | 829  | 900  |
| 700              | 75/65                                  | 1391                         | 1517 | 1636 | 1749 | 1705                         | 1862 | 2008 | 2142 | 1974                         | 2155 | 2314 | 2452 | 2351                         | 2584 | 2808 | 3024 |
|                  | 70/55                                  | 1125                         | 1228 | 1325 | 1419 | 1377                         | 1506 | 1627 | 1741 | 1594                         | 1741 | 1872 | 1985 | 1893                         | 2081 | 2261 | 2438 |
|                  | 55/45                                  | 714                          | 781  | 844  | 908  | 871                          | 957  | 1037 | 1117 | 1007                         | 1103 | 1189 | 1262 | 1191                         | 1308 | 1420 | 1537 |
|                  | 45/40                                  | 491                          | 537  | 582  | 628  | 597                          | 657  | 715  | 774  | 690                          | 757  | 818  | 868  | 812                          | 891  | 967  | 1050 |

Q for other temperatures: [↗ RADIK PLAN PREMIUM](#), [↗ RADIK LINE PREMIUM](#)

# RADIK PREMIUM

HEAT OUTPUT IN WATTS CERTIFIED TO EN 442

| 20 °C            |                                        | Type 10       |      |      |      | Type 11 |      |      |      | Type 20 |      |      |      | Type 21 |      |      |      | Type 22 |      |      |      |
|------------------|----------------------------------------|---------------|------|------|------|---------|------|------|------|---------|------|------|------|---------|------|------|------|---------|------|------|------|
| Length L<br>[mm] | t <sub>1</sub> /t <sub>2</sub><br>[°C] | Height H [mm] |      |      |      |         |      |      |      |         |      |      |      |         |      |      |      |         |      |      |      |
|                  |                                        | 1600          | 1800 | 2000 | 2200 | 1600    | 1800 | 2000 | 2200 | 1600    | 1800 | 2000 | 2200 | 1600    | 1800 | 2000 | 2200 | 1600    | 1800 | 2000 | 2200 |
| 400              | 75/65                                  | 671           | 745  | 823  | 906  | 863     | 952  | 1038 | 1121 | 1037    | 1146 | 1248 | 1356 | 1212    | 1332 | 1440 | 1548 | 1452    | 1584 | 1716 | 1848 |
|                  | 70/55                                  | 545           | 604  | 666  | 731  | 694     | 766  | 837  | 904  | 837     | 926  | 1009 | 1098 | 977     | 1074 | 1160 | 1247 | 1170    | 1276 | 1381 | 1487 |
|                  | 55/45                                  | 350           | 386  | 423  | 462  | 436     | 482  | 527  | 570  | 528     | 586  | 640  | 698  | 616     | 676  | 730  | 784  | 737     | 803  | 868  | 933  |
|                  | 45/40                                  | 242           | 266  | 291  | 316  | 297     | 329  | 360  | 390  | 361     | 401  | 440  | 480  | 421     | 462  | 498  | 534  | 503     | 547  | 591  | 635  |
| 500              | 75/65                                  | 839           | 932  | 1029 | 1133 | 1079    | 1190 | 1298 | 1401 | 1296    | 1433 | 1560 | 1695 | 1515    | 1665 | 1800 | 1935 | 1815    | 1980 | 2145 | 2310 |
|                  | 70/55                                  | 682           | 755  | 833  | 914  | 868     | 958  | 1046 | 1130 | 1046    | 1157 | 1262 | 1372 | 1222    | 1342 | 1450 | 1558 | 1463    | 1595 | 1727 | 1859 |
|                  | 55/45                                  | 437           | 482  | 529  | 578  | 545     | 602  | 658  | 712  | 660     | 732  | 800  | 873  | 771     | 846  | 913  | 980  | 921     | 1003 | 1085 | 1166 |
|                  | 45/40                                  | 303           | 333  | 363  | 395  | 371     | 411  | 450  | 487  | 452     | 502  | 549  | 600  | 527     | 577  | 623  | 668  | 629     | 684  | 739  | 794  |
| 600              | 75/65                                  | 1006          | 1118 | 1235 | 1359 | 1294    | 1427 | 1557 | 1681 | 1555    | 1719 | 1872 | 2034 | 1818    | 1998 | 2160 | 2322 | 2178    | 2376 | 2574 | 2772 |
|                  | 70/55                                  | 818           | 907  | 999  | 1097 | 1042    | 1150 | 1255 | 1356 | 1255    | 1389 | 1514 | 1647 | 1466    | 1611 | 1740 | 1870 | 1755    | 1914 | 2072 | 2230 |
|                  | 55/45                                  | 525           | 579  | 634  | 693  | 654     | 723  | 790  | 855  | 792     | 879  | 960  | 1047 | 925     | 1015 | 1095 | 1176 | 1105    | 1204 | 1302 | 1400 |
|                  | 45/40                                  | 364           | 399  | 436  | 474  | 445     | 493  | 539  | 584  | 542     | 602  | 659  | 720  | 632     | 693  | 747  | 802  | 755     | 821  | 887  | 952  |
| 700              | 75/65                                  | 1174          | 1304 | 1441 | 1586 | 1510    | 1665 | 1817 | 1961 | 1814    | 2006 | 2184 | 2373 | 2121    | 2331 | 2520 | 2709 | 2541    | 2772 | 3003 | 3234 |
|                  | 70/55                                  | 954           | 1058 | 1166 | 1280 | 1215    | 1341 | 1464 | 1582 | 1464    | 1620 | 1766 | 1921 | 1711    | 1879 | 2030 | 2182 | 2048    | 2233 | 2418 | 2602 |
|                  | 55/45                                  | 612           | 675  | 740  | 809  | 763     | 843  | 922  | 997  | 924     | 1025 | 1120 | 1222 | 1079    | 1184 | 1278 | 1372 | 1290    | 1404 | 1519 | 1633 |
|                  | 45/40                                  | 424           | 466  | 509  | 554  | 520     | 575  | 629  | 681  | 632     | 703  | 769  | 840  | 737     | 808  | 872  | 935  | 880     | 958  | 1035 | 1111 |

Q for other temperatures: [↗ RADIK PREMIUM](#)

# BASIC TECHNICAL PARAMETERS

## RADIK PLAN PREMIUM, LINE PREMIUM

|                           | Type 11 PLAN<br>Type 11 LINE |        |        |        | Type 20 PLAN<br>Type 20 LINE |        |        |        | Type 21 PLAN<br>Type 21 LINE |        |        |        | Type 22 PLAN<br>Type 22 LINE |        |        |        |
|---------------------------|------------------------------|--------|--------|--------|------------------------------|--------|--------|--------|------------------------------|--------|--------|--------|------------------------------|--------|--------|--------|
| Height H [mm]             | 1600                         | 1800   | 2000   | 2200   | 1600                         | 1800   | 2000   | 2200   | 1600                         | 1800   | 2000   | 2200   | 1600                         | 1800   | 2000   | 2200   |
| Nominal heat output [W/m] | 1987                         | 2167   | 2337   | 2498   | 2435                         | 2660   | 2868   | 3060   | 2820                         | 3078   | 3305   | 3503   | 3358                         | 3692   | 4012   | 4320   |
| Temp. exponent n [-]      | 1,3044                       | 1,2997 | 1,2950 | 1,2830 | 1,3136                       | 1,3037 | 1,2937 | 1,2751 | 1,3169                       | 1,3102 | 1,3034 | 1,3011 | 1,3312                       | 1,3331 | 1,3349 | 1,3251 |
| Radiator weight [kg/m]    | 55,7                         | 62,7   | 69,7   | 75,5   | 76,1                         | 85,5   | 94,6   | 105,2  | 84,5                         | 94,5   | 105,1  | 116    | 93,5                         | 103,2  | 112,6  | 126,5  |
| Water volume [l/m]        | 7,2                          | 8,4    | 9,3    | 10,2   | 14,1                         | 16,2   | 18     | 20,1   | 14,1                         | 16,2   | 18     | 20,1   | 14,1                         | 16,2   | 18     | 20,1   |

## RADIK PREMIUM

|                           | Type 10 |        |        |        | Type 11 |        |        |        | Type 20 |        |        |        | Type 21 |        |        |        | Type 22 |        |        |        |
|---------------------------|---------|--------|--------|--------|---------|--------|--------|--------|---------|--------|--------|--------|---------|--------|--------|--------|---------|--------|--------|--------|
| Height H [mm]             | 1600    | 1800   | 2000   | 2200   | 1600    | 1800   | 2000   | 2200   | 1600    | 1800   | 2000   | 2200   | 1600    | 1800   | 2000   | 2200   | 1600    | 1800   | 2000   | 2200   |
| Nominal heat output [W/m] | 1677    | 1863   | 2058   | 2265   | 2157    | 2379   | 2595   | 2802   | 2592    | 2865   | 3120   | 3390   | 3030    | 3330   | 3600   | 3870   | 3630    | 3960   | 4290   | 4620   |
| Temp. exponent n [-]      | 1,2748  | 1,2892 | 1,3037 | 1,3182 | 1,3361  | 1,3320 | 1,3278 | 1,3237 | 1,3202  | 1,3135 | 1,3068 | 1,3000 | 1,3235  | 1,3263 | 1,3292 | 1,3320 | 1,3276  | 1,3310 | 1,3344 | 1,3379 |
| Radiator weight [kg/m]    | 30,9    | 34,5   | 38,1   | 42     | 42,9    | 48,3   | 53,7   | 57,9   | 63,3    | 71,1   | 78,6   | 87,6   | 71,7    | 80,1   | 89,1   | 98,4   | 80,7    | 88,8   | 96,6   | 108,9  |
| Water volume [l/m]        | 7,2     | 8,4    | 9,3    | 10,2   | 7,2     | 8,4    | 9,3    | 10,2   | 14,1    | 16,2   | 18     | 20,1   | 14,1    | 16,2   | 18     | 20,1   | 14,1    | 16,2   | 18     | 20,1   |

## RADIK PLAN VKM8, PLAN VKM8 - L, LINE VKM8, LINE VKM8 - L

|                           | Type 11 |        |        |        |        |        | Type 20 |        |        | Type 21 |        |        |        |        |        |
|---------------------------|---------|--------|--------|--------|--------|--------|---------|--------|--------|---------|--------|--------|--------|--------|--------|
| Height H [mm]             | 300     | 400    | 500    | 600    | 700    | 900    | 500     | 600    | 700    | 300     | 400    | 500    | 600    | 700    | 900    |
| Nominal heat output [W/m] | 530     | 658    | 780    | 897    | 1011   | 1231   | 848     | 969    | 1085   | 720     | 904    | 1072   | 1226   | 1367   | 1617   |
| Temp. exponent n [-]      | 1,2617  | 1,2698 | 1,2778 | 1,2859 | 1,2989 | 1,3249 | 1,2895  | 1,2924 | 1,2988 | 1,3019  | 1,3144 | 1,3268 | 1,3393 | 1,3446 | 1,3553 |
| $K_M$                     | 3,8079  | 4,5801 | 5,2620 | 5,8626 | 6,2800 | 6,9071 | 5,4648  | 6,1741 | 6,7423 | 4,4202  | 5,2850 | 5,9704 | 6,5022 | 7,1012 | 8,0556 |
| Radiator weight [kg/m]    | 13,4    | 16,6   | 20,6   | 24,4   | 29,1   | 37,0   | 25,2    | 30     | 35     | 17,6    | 22,9   | 27,0   | 32,0   | 37     | 48,8   |
| Water volume [l/m]        | 1,9     | 2,3    | 2,7    | 3,1    | 3,5    | 4,5    | 5,3     | 6,2    | 7,0    | 3,7     | 4,5    | 5,3    | 6,2    | 7,0    | 8,7    |

|                           | Type 22 |        |        |        |        |         | Type 33 |        |         |         |         |         |
|---------------------------|---------|--------|--------|--------|--------|---------|---------|--------|---------|---------|---------|---------|
| Height H [mm]             | 300     | 400    | 500    | 600    | 700    | 900     | 300     | 400    | 500     | 600     | 700     | 900     |
| Nominal heat output [W/m] | 914     | 1165   | 1400   | 1621   | 1830   | 2215    | 1337    | 1689   | 2022    | 2341    | 2648    | 3231    |
| Temp. exponent n [-]      | 1,2863  | 1,2990 | 1,3117 | 1,3244 | 1,3327 | 1,3493  | 1,3284  | 1,3252 | 1,3219  | 1,3187  | 1,3313  | 1,3565  |
| $K_M$                     | 5,9643  | 7,2338 | 8,2716 | 9,1131 | 9,9594 | 11,2967 | 7,3998  | 9,4657 | 11,4792 | 13,4577 | 14,4904 | 16,0208 |
| Radiator weight [kg/m]    | 20,4    | 26,7   | 30,6   | 36,6   | 42,6   | 55,8    | 29,0    | 38,2   | 43,8    | 52,4    | 60,8    | 79,7    |
| Water volume [l/m]        | 3,7     | 4,5    | 5,3    | 6,2    | 7,1    | 8,9     | 5,4     | 6,7    | 8,0     | 9,3     | 10,5    | 13,0    |

Characteristic equation:  $\phi = K_M \cdot \Delta T^n \left[ \frac{W}{m} \right]$ ,  $\Delta T = \frac{t_1 + t_2}{2} - t_l [K]$

$t_1$  – temperature water-in,  $t_2$  – temperature water-out,  $t_l$  – relative air temperature

# ORDER ITEM CODES

| Steel panel radiators | Version  | Model                            | Type             | Code for ordering |
|-----------------------|----------|----------------------------------|------------------|-------------------|
| RADIK                 | VERTIKAL | ☑ <u>RADIK PLAN VERTIKAL - M</u> | 10 PLAN VERTIKAL | 10HHHLLL-V0P0010  |
|                       |          |                                  | 20 PLAN VERTIKAL | 20HHHLLL-V0P0010  |
|                       |          | ☑ <u>RADIK LINE VERTIKAL - M</u> | 10 LINE VERTIKAL | 10HHHLLL-V0L0010  |
|                       |          |                                  | 20 LINE VERTIKAL | 20HHHLLL-V0L0010  |
|                       |          | ☑ <u>RADIK PREMIUM</u>           | 10 PREMIUM       | 10HHHLLL-WU-0010  |
|                       |          |                                  | 11 PREMIUM       | 11HHHLLL-WU-0010  |
|                       |          |                                  | 20 PREMIUM       | 20HHHLLL-WU-0010  |
|                       |          |                                  | 21 PREMIUM       | 21HHHLLL-WU-0010  |
|                       |          |                                  | 22 PREMIUM       | 22HHHLLL-WU-0010  |
|                       |          | ☑ <u>RADIK PLAN PREMIUM</u>      | 11 PLAN PREMIUM  | 11HHHLLL-WUP0010  |
|                       |          |                                  | 20 PLAN PREMIUM  | 20HHHLLL-WUP0010  |
|                       |          |                                  | 21 PLAN PREMIUM  | 21HHHLLL-WUP0010  |
|                       |          |                                  | 22 PLAN PREMIUM  | 22HHHLLL-WUP0010  |
|                       |          | ☑ <u>RADIK LINE PREMIUM</u>      | 11 LINE PREMIUM  | 11HHHLLL-WUL0010  |
|                       |          |                                  | 20 LINE PREMIUM  | 20HHHLLL-WUL0010  |
|                       |          |                                  | 21 LINE PREMIUM  | 21HHHLLL-WUL0010  |
|                       |          |                                  | 22 LINE PREMIUM  | 22HHHLLL-WUL0010  |
|                       | HYGIENE  | ☑ <u>RADIK HYGIENE VKM8</u>      | 10 HYGIENE VKM8  | 10HHHLLL-SCH0010  |
|                       |          |                                  | 20S HYGIENE VKM8 | 20HHHLLL-SCH0010  |
|                       |          |                                  | 30 HYGIENE VKM8  | 30HHHLLL-SCH0010  |
|                       |          | ☑ <u>RADIK HYGIENE VK</u>        | 10 HYGIENE VK    | 10HHHLLL-6CH0010  |
|                       |          |                                  | 20S HYGIENE VK   | 20HHHLLL-6CH0010  |
|                       |          |                                  | 30 HYGIENE VK    | 30HHHLLL-6CH0010  |
|                       |          | ☑ <u>RADIK HYGIENE</u>           | 10 HYGIENE       | 10HHHLLL-5CH0010  |
|                       |          |                                  | 20S HYGIENE      | 20HHHLLL-5CH0010  |
|                       |          |                                  | 30 HYGIENE       | 30HHHLLL-5CH0010  |
|                       |          | ☑ <u>RADIK CLEAN VKM8</u>        | 10 CLEAN VKM8    | 10HHHLLL-S0-0010  |
|                       |          |                                  | 20S CLEAN VKM8   | 20HHHLLL-SC-0010  |
|                       |          |                                  | 30 CLEAN VKM8    | 30HHHLLL-SC-0010  |
|                       |          | ☑ <u>RADIK CLEAN VK</u>          | 10 CLEAN VK      | 10HHHLLL-60-0010  |
|                       |          |                                  | 20S CLEAN VK     | 20HHHLLL-6C-0010  |
|                       |          |                                  | 30 CLEAN VK      | 30HHHLLL-6C-0010  |
|                       |          | ☑ <u>RADIK CLEAN</u>             | 10 CLEAN         | 10HHHLLL-50-0010  |
|                       |          |                                  | 20S CLEAN        | 20HHHLLL-5C-0010  |
|                       |          |                                  | 30 CLEAN         | 30HHHLLL-5C-0010  |

☑ Note: for the ordering code scheme, see page 99.