Your Gasket Professionals
Made in Germany

Möller Metall-Dichtungen GmbH

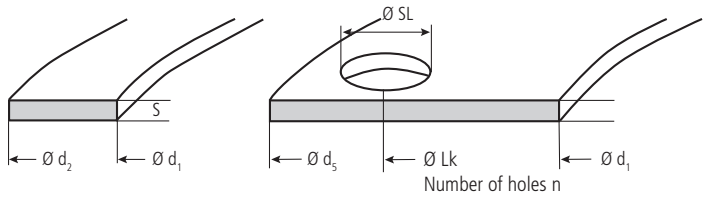
Quality Is Our Passion

# Gaskets and Flanges for Exhaust Systems

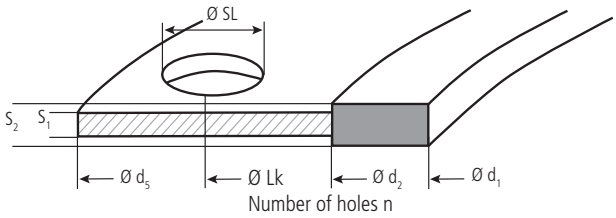

We manufacture gaskets according to DIN 86072-1 | DIN 86072-2
and flanges according to DIN 86044-2

# Gasket designs

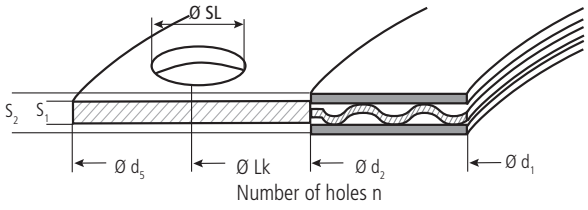
## Flat gaskets according to DIN 86072-1 for flanges according to DIN 86044-1




## 2-substance gasket form A according to DIN 86072-2 for flanges according to DIN 86044-2




## 2-substance gasket form B according to DIN 86072-2 for flanges according to DIN 86044-2




Environmental as well as climate protection requirements, in particular those for the tightness of exhaust systems, have necessitated a change in the design of exhaust systems both at sea (ships) and on land (combined heat and power plants). The previously known system according to DIN 86044-1/ DIN86072-1 is not technically capable of meeting the current requirements. The new system DIN 86044-2/DIN86072-2 makes it easy to achieve and implement the current requirements, e.g. also from VDI 2290.
In some designs, the relatively light flanges according to DIN 86044-1 have been replaced by the heavy welding-neck flanges Type 11 according to DIN EN 1092-1.
Unfortunately, one is finally doomed to fail anyway due to the use of inappropriate gaskets.
Exhaust gaskets are used in shipbuilding, among other areas, or used in thermal power plants. Depending on the flange design MMD-exhaust gaskets have increasingly been made consisting of a sealant and a metal carrier made of stainless steel.

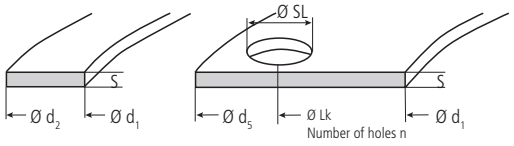
Examples:

- Flat gasket according to DIN 86072-1 (for flanges according to DIN 86044-1 - heavy duty version)
- 2-substance gasket form A according to DIN 86072-2 (for flanges according to DIN 86044-2 - light version)
- Corrugated ring gasket with support ring form B according to DIN 86072-2 (for flanges according to DIN 86044-2 ...light design)

**Other gasket shapes deviating from the standards on request.**

| Thickness of gaskets according to DIN 86072-2 for flanges according to DIN 86044-2 (light version) | | |
|---|---|---|
| | Material thickness | |
| Gasket form | Support ring $S_1$ | Sealing Element $S_2$ |
| Form A | 1 (2[1]) | 2 (4[1]) |
| Form B | 1.5 | 3 |
| Dimensions in mm - [1] Thicknesses not mentioned in standard | | |

# Flat gaskets according to DIN 86072-1




**Versions:**

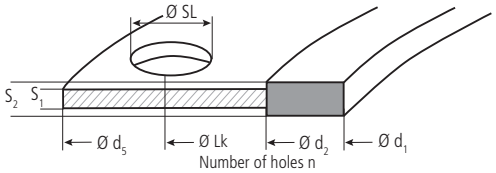
| | |
|---|---|
| MMD-FG-IBC | … centering at the bolts |
| MMD-FG-FF | … with bolt holes |
| MMD-FG-IE-IBC | ... centering at the bolts and inner eyelet |
| MMD-FG-IE-FF | … with bolt holes and inner eyelet |

**Dimensions of flat gaskets according to DIN 86072-1 for flanges according to DIN 86044-1 (heavy-duty version), thickness s = 2 mm**

| Nominal width | | | | Flat gasket form | | Hole circle Ø LK | Pressure stage of the gasket according to 1514-1 (DIN 2690) | Flanges according to 1092-1 Pressure stage (old standard) Preferred form type 01/type 11 |
|---|---|---|---|---|---|---|---|---|
| DN | Outer Ø $d_1$ | Outer Ø $d_2$ | Outer Ø $d_5$ | Bolt holes Quantity n | Bolt holes Ø SL | | | |
| 32 | 43 | 82 | | | | | PN10-40 | PN40 (DIN 2635) |
| 40 | 49 | 92 | | | | | | |
| 50 | 61 | 107 | | | | | | PN16 (DIN 2633) |
| 60[1] | 72(--) | 117 | | | | | | |
| 65[2] | 77 | 127 | | | | | | |
| 80 | 89 (90) | 142 | | | | | | |
| 100 | 115 | 162 | | | | | PN10-16 | |
| 125 | 141 | 192 | | | | | | |
| 150 | 169 | 218 | | | | | | |
| (175) | (195) | (267) | | | | | | |
| 200 | 220 | 262 | | | | | PN6 | Flanges according to DIN 86044-1 |
| 250 | 273 (274) | 317 (318) | | | | | | |
| 300 | 324 (325) | 373 | | | | | | |
| 350 | 356 (386) | 423 | | | | | | |
| 400 | 407 (420) | 473 | | | | | | |
| 450 | 458 (470) | 528 | | | | | | |
| 500 | 508 (620) | 578 | | | | | | |
| 550 | 565 | | 703 | 20 | 22 | 650 | | |
| 600 | 616 | | 754 | 20 | | 700 | | |
| 650 | 668 | | 805 | 20 | | 750 | | |
| 700 | 718 | | 856 | 24 | | 800 | | |
| 750 | 770 | | 907 | 24 | | 860 | | |
| 800 | 820 | | 958 | 24 | | 900 | | |
| 850 | 872 | | 1010 | 28 | | 950 | | |
| 900 | 922 | | 1060 | 28 | | 1010 | | |
| 950 | 972 | | 1110 | 28 | | 1060 | | |
| 1000 | 1024 | | 1162 | 32 | | 1110 | | |
| 1100 | 1128 | | 1266 | 32 | | 1210 | | |
| 1200 | 1228 | | 1366 | 36 | | 1310 | | |
| 1300 | 1328 | | 1466 | 40 | | 1410 | | |
| 1400 | 1428 | | 1566 | 40 | | 1510 | | |
| 1500 | 1528 | | 1666 | 44 | | 1610 | | |
| 1600 | 1628 | | 1766 | 48 | | 1710 | | |
| 1700 | 1728 | | 1866 | 48 | | 1810 | | |
| 1800 | 1828 | | 1966 | 52 | | 1910 | | |
| 1900 | 1928 | | 2066 | 56 | | 2010 | | |
| 2000 | 2028 | | 2166 | 56 | | 2110 | | |
| 2100 | 2128 | | 2266 | 60 | | 2210 | | |
| 2200 | 2228 | | 2366 | 64 | | 2310 | | |
| 2300 | 2328 | | 2466 | 64 | | 2410 | | |
| 2400 | 2428 | | 2566 | 68 | | 2510 | | |
| 2500 | 2528 | | 2666 | 72 | | 2610 | | |
| 2600 | 2628 | | 2766 | 72 | | 2710 | | |
| 2700 | 2728 | | 2866 | 76 | | 2810 | | |
| 2800 | 2828 | | 2966 | 80 | | 2910 | | |
| 2900 | 2928 | | 3066 | 80 | | 3010 | | |
| 3000 | 3028 | | 3133 | 84 | | 3110 | | |

Dimensions in mm

# 2-substance gasket according to DIN 86072-2 – Form A




**Versions:**

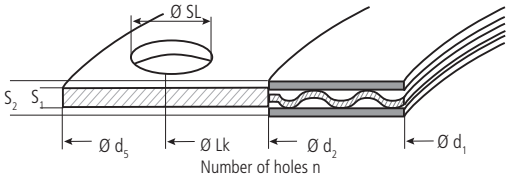
| | |
|---|---|
| MMD-FG/FG-BUR-FF | ...with support ring |
| MMD-FG/FG-IE-BUR-FF | ...with inner eyelet |
| MMD-FG/FG-IOE-BUR-FF | ...with support ring, inner and outer eyelets |

**Dimensions for 2-substance gaskets form A according to DIN 86072-2 for flanges according to DIN 86044-2 (light version)**

| Nominal width | Sealing elements | | Support ring | | | | approx. mass (1.9 kg/dm³) | |
|---|---|---|---|---|---|---|---|---|
| DN | Inner Ø $d_1$ | Outer Ø $d_2$ | Hole circle Lk | Outer Ø $d_5$ | Bolt holes Quantity n | Bolt holes Ø SL | Form A kg | Form B kg |
| 32 | 45 | 81 | 98 | 120 | 8 | | 0.047 | 0.079 |
| 40 | 51 | 87 | 104 | 126 | 8 | | 0.050 | 0.085 |
| 50 | 63 | 101 | 118 | 140 | 8 | | 0.059 | 0.101 |
| 65 | 79 | 117 | 134 | 156 | 8 | | 0.069 | 0.118 |
| 80 | 92 | 130 | 147 | 169 | 12 | 14 | 0.072 | 0.124 |
| 100 | 119 | 159 | 176 | 198 | 12 | | 0.090 | 0.157 |
| 125 | 145 | 185 | 202 | 224 | 12 | | 0.106 | 0.185 |
| 150 | 174 | 214 | 231 | 253 | 16 | | 0.119 | 0.209 |
| 175 | 199 | 239 | 256 | 278 | 16 | | 0.134 | 0.236 |
| 200 | 226 | 268 | 289 | 316 | 12 | | 0.184 | 0.317 |
| 250 | 280 | 322 | 343 | 370 | 16 | | 0.216 | 0.373 |
| 300 | 331 | 373 | 394 | 421 | 20 | | 0.245 | 0.426 |
| 350 | 363 | 405 | 426 | 453 | 20 | | 0.269 | 0.466 |
| 400 | 414 | 456 | 477 | 504 | 20 | | 0.306 | 0.531 |
| 450 | 465 | 507 | 528 | 555 | 24 | | 0.335 | 0.583 |
| 500 | 516 | 558 | 579 | 606 | 28 | | 0.365 | 0.636 |
| 550 | 566 | 608 | 629 | 656 | 28 | | 0.400 | 0.695 |
| 600 | 618 | 660 | 681 | 708 | 32 | | 0.432 | 0.753 |
| 650 | 668 | 710 | 731 | 758 | 32 | | 0.593 | 0.812 |
| 700 | 720 | 762 | 783 | 810 | 36 | | 0.498 | 0.870 |
| 750 | 770 | 812 | 833 | 860 | 40 | | 0.528 | 0.772 |
| 800 | 822 | 864 | 885 | 912 | 44 | | 0.557 | 0.974 |
| 850 | 872 | 914 | 935 | 962 | 44 | | 0.591 | 1.033 |
| 900 | 924 | 966 | 987 | 1014 | 48 | | 0.624 | 1.092 |
| 950 | 974 | 1016 | 1037 | 1064 | 48 | | 0.658 | 1.151 |
| 1000 | 1026 | 1068 | 1089 | 1116 | 52 | | 0.691 | 1.209 |
| 1100 | 1130 | 1172 | 1193 | 1220 | 60 | | 0.751 | 1.316 |
| 1200 | 1230 | 1272 | 1293 | 1320 | 64 | 18 | 0.816 | 1.430 |
| 1300 | 1330 | 1372 | 1393 | 1420 | 68 | | 0.881 | 1.545 |
| 1400 | 1430 | 1472 | 1493 | 1520 | 72 | | 0.947 | 1.659 |
| 1500 | 1530 | 1572 | 1593 | 1620 | 76 | | 1.012 | 1.774 |
| 1600 | 1630 | 1672 | 1693 | 1720 | 80 | | 1.073 | 1.888 |
| 1700 | 1730 | 1772 | 1793 | 1820 | 84 | | 1.143 | 2.003 |
| 1800 | 1830 | 1872 | 1893 | 1920 | 92 | | 1.200 | 2.105 |
| 1900 | 1930 | 1972 | 1993 | 2020 | 96 | | 1.265 | 2.220 |
| 2000 | 2030 | 2072 | 2093 | 2120 | 100 | | 1.331 | 2.334 |
| 2100 | 2130 | 2172 | 2193 | 2220 | 108 | | 1.388 | 2.436 |
| 2200 | 2230 | 2272 | 2293 | 2320 | 112 | | 1.453 | 2.551 |
| 2300 | 2330 | 2372 | 2393 | 2420 | 116 | | 1.519 | 2.665 |
| 2400 | 2430 | 2472 | 2493 | 2520 | 120 | | 1.584 | 2.780 |
| 2500 | 2530 | 2572 | 2593 | 2620 | 128 | | 1.641 | 2.882 |
| 2600 | 2630 | 2672 | 2693 | 2720 | 132 | | 1.706 | 2.997 |
| 2700 | 2730 | 2772 | 2793 | 2820 | 136 | | 1.775 | 3.111 |
| 2800 | 2830 | 2872 | 2893 | 2920 | 140 | | 1.837 | 3.226 |
| 2900 | 2930 | 2972 | 2993 | 3020 | 148 | | 1.894 | 3.328 |
| 3000 | 3030 | 3072 | 3093 | 3120 | 152 | | 1.960 | 3.442 |

Dimensions in mm

# 2-substance gasket according to DIN 86072-2 - Form B




**Versions:**

| | |
|---|---|
| MMD-CG-FG-BUR-FF | with support ring |
| MMD-CG-FG-IE-BUR-FF | with support ring and inner eyelet on the corrugated ring |
| MMD-CG-FG-IOE-BUR-FF | with support ring, inner and outer eyelets on the corrugated ring |

**Dimensions for corrugated ring gaskets with support rings form B DIN 86072-2 for flanges according to DIN 86044-2 (light version)**

| DN | Sealing elements | | Support ring | | | | approx. mass (1.9 kg/dm³) | |
|---|---|---|---|---|---|---|---|---|
| | Inner Ø $d_1$ | Outer Ø $d_2$ | Hole circle Lk | Outer Ø $d_5$ | Bolt holes | | Form A | Form B |
| | | | | | Quantity n | Ø SL | kg | |
| 32 | 45 | 81 | 98 | 120 | 8 | | 0.047 | 0.079 |
| 40 | 51 | 87 | 104 | 126 | 8 | | 0.050 | 0.085 |
| 50 | 63 | 101 | 118 | 140 | 8 | | 0.059 | 0.101 |
| 65 | 79 | 117 | 134 | 156 | 8 | | 0.069 | 0.118 |
| 80 | 92 | 130 | 147 | 169 | 12 | 14 | 0.072 | 0.124 |
| 100 | 119 | 159 | 176 | 198 | 12 | | 0.090 | 0.157 |
| 125 | 145 | 185 | 202 | 224 | 12 | | 0.106 | 0.185 |
| 150 | 174 | 214 | 231 | 253 | 16 | | 0.119 | 0.209 |
| 175 | 199 | 239 | 256 | 278 | 16 | | 0.134 | 0.236 |
| 200 | 226 | 268 | 289 | 316 | 12 | | 0.184 | 0.317 |
| 250 | 280 | 322 | 343 | 370 | 16 | | 0.216 | 0.373 |
| 300 | 331 | 373 | 394 | 421 | 20 | | 0.245 | 0.426 |
| 350 | 363 | 405 | 426 | 453 | 20 | | 0.269 | 0.466 |
| 400 | 414 | 456 | 477 | 504 | 20 | | 0.306 | 0.531 |
| 450 | 465 | 507 | 528 | 555 | 24 | | 0.335 | 0.583 |
| 500 | 516 | 558 | 579 | 606 | 28 | | 0.365 | 0.636 |
| 550 | 566 | 608 | 629 | 656 | 28 | | 0.400 | 0.695 |
| 600 | 618 | 660 | 681 | 708 | 32 | | 0.432 | 0.753 |
| 650 | 668 | 710 | 731 | 758 | 32 | | 0.593 | 0.812 |
| 700 | 720 | 762 | 783 | 810 | 36 | | 0.498 | 0.870 |
| 750 | 770 | 812 | 833 | 860 | 40 | | 0.528 | 0.772 |
| 800 | 822 | 864 | 885 | 912 | 44 | | 0.557 | 0.974 |
| 850 | 872 | 914 | 935 | 962 | 44 | | 0.591 | 1.033 |
| 900 | 924 | 966 | 987 | 1014 | 48 | | 0.624 | 1.092 |
| 950 | 974 | 1016 | 1037 | 1064 | 48 | | 0.658 | 1.151 |
| 1000 | 1026 | 1068 | 1089 | 1116 | 52 | | 0.691 | 1.209 |
| 1100 | 1130 | 1172 | 1193 | 1220 | 60 | | 0.751 | 1.316 |
| 1200 | 1230 | 1272 | 1293 | 1320 | 64 | 18 | 0.816 | 1.430 |
| 1300 | 1330 | 1372 | 1393 | 1420 | 68 | | 0.881 | 1.545 |
| 1400 | 1430 | 1472 | 1493 | 1520 | 72 | | 0.947 | 1.659 |
| 1500 | 1530 | 1572 | 1593 | 1620 | 76 | | 1.012 | 1.774 |
| 1600 | 1630 | 1672 | 1693 | 1720 | 80 | | 1.073 | 1.888 |
| 1700 | 1730 | 1772 | 1793 | 1820 | 84 | | 1.143 | 2.003 |
| 1800 | 1830 | 1872 | 1893 | 1920 | 92 | | 1.200 | 2.105 |
| 1900 | 1930 | 1972 | 1993 | 2020 | 96 | | 1.265 | 2.220 |
| 2000 | 2030 | 2072 | 2093 | 2120 | 100 | | 1.331 | 2.334 |
| 2100 | 2130 | 2172 | 2193 | 2220 | 108 | | 1.388 | 2.436 |
| 2200 | 2230 | 2272 | 2293 | 2320 | 112 | | 1.453 | 2.551 |
| 2300 | 2330 | 2372 | 2393 | 2420 | 116 | | 1.519 | 2.665 |
| 2400 | 2430 | 2472 | 2493 | 2520 | 120 | | 1.584 | 2.780 |
| 2500 | 2530 | 2572 | 2593 | 2620 | 128 | | 1.641 | 2.882 |
| 2600 | 2630 | 2672 | 2693 | 2720 | 132 | | 1.706 | 2.997 |
| 2700 | 2730 | 2772 | 2793 | 2820 | 136 | | 1.775 | 3.111 |
| 2800 | 2830 | 2872 | 2893 | 2920 | 140 | | 1.837 | 3.226 |
| 2900 | 2930 | 2972 | 2993 | 3020 | 148 | | 1.894 | 3.328 |
| 3000 | 3030 | 3072 | 3093 | 3120 | 152 | | 1.960 | 3.442 |

Dimensions in mm

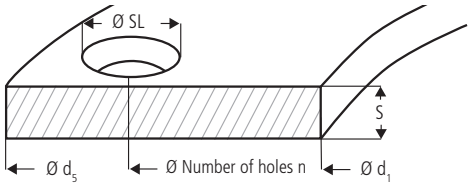
# Application range of gaskets according to DIN 86076

| Operating medium | Temperature °C | Elastomere | | Fiber composite | Graphite |
|---|---|---|---|---|---|
| | | NBR (GI MO) | EPDM (GI MW) | FA | GR |
| Distilled water | 100 | - | + | 0 | + |
| Boiler feed water | 95 | 0 | - | 0 | + |
| Drinking water | 85 | - | +[1] | 0[1] | +[1] |
| Hot water (heating) | 110 | 0 | + | 0 | + |
| Fresh cooling water2) | 90 | 0 | + | 0 | + |
| Sea water | -3 bis 45 | + | - | + | +[3] |
| Drainage and ballast water | -3 bis 45 | + | - | + | +[3] |
| Sewage, sanitary and scupper water | 70 | + | - | + | +[3]) |
| Fuel | | | | | |
| Diesel fuel | 60 | + | - | + | + |
| Heavy oil | 150 | 0 | - | 0 | + |
| Oils | | | | | |
| Lubricating oil | 90 | 0 | - | 0 | + |
| Hydraulic fluids2) | 90 | 0 | - | 0 | + |
| Heat transfer oil | 0 bis 240 | - | - | - | + |
| Gases | | | | | |
| Compressed air | -30 bis 80 | + | +[4] | + | + |
| Exhaust gas | max. 500 | - | - | - | + |
| Fire-fighting equipment | | | | | |
| Fire extinguishing gases5) | -40 bis 55 | +[2] | +[2] | +[2] | +[2] |
| Water fire fighting systems | 0 bis 35 | + | + | + | + |
| Foam fire extinguishing systems | 0 bis 35 | + | + | + | + |
| Air conditioning | | | | | |
| Refrigerant | -40 bis 80 | +[2] | +[2] | +[2] | +[2] |
| Climate/ ventilation | 0 bis 60 | + | + | + | + |
| Steam | | | | | |
| Saturated steam | bis 200 | - | - | - | + |
| Hot steam | 500 | - | - | - | + |

The gasket selection or selection of the soft material for the supports is done according to DIN 86076. Graphite is used.

1) Approval according to DVGW worksheet W 270 or KTW 1 recommendation 1.3.13 required
2) Manufacturer's instructions on resistance must be observed
3) Observe material combination of gasket/ pipe with regard to the electrochemical series of voltages (therefore, e.g. with CuNiFe not applicable)
4) wenn ölfrei
5) The seal must be approved by the manufacturer of the extinguishing agent
+ = suitable
0 = suitable up to 80°C max.
- = not suitable

# Dimensions for flanges according to DIN 86044-2




Materials of the customer's choice. Commonly used are stainless steels such as 1.4401, 1.4404, 1.4571 for use with dry exhaust gas and other highly corrosion-resistant alloy steels for use in exhaust systems with outlet under water.
The flanges can be laser cut from sheet metal and must meet the requirements for surface quality according to DIN 86044-2.

| Nominal width DN | Inner Ø $d_1$ | Thickness S | Hole circle Lk | Outer Ø $d_5$ | Bolt holes Quantity n | Bolt holes Ø SL | ca. Masse (1,9 kg/dm³) = kg | |
|---|---|---|---|---|---|---|---|---|
| 32 | 43 | 10 | 98 | 123 | 8 | | | 0.72 |
| 40 | 49 | 10 | 104 | 129 | 8 | | | 0.78 |
| 50 | 61 | 10 | 118 | 143 | 8 | | | 0.93 |
| 65 | 77 | 10 | 134 | 159 | 8 | | | 1.09 |
| 80 | 90 | 10 | 147 | 172 | 12 | 14 | | 1.17 |
| 100 | 116 | 12 | 176 | 201 | 12 | | | 1.81 |
| 125 | 142 | 12 | 202 | 227 | 12 | | | 2.13 |
| 150 | 171 | 12 | 231 | 256 | 16 | | | 2.44 |
| 175 | X[1] | 12 | 256 | 281 | 16 | | [2] | 3.09 |
| 200 | 222 | 12 | 289 | 319 | 12 | | | 3.57 |
| 250 | 276 | 15 | 343 | 373 | 16 | | | 5.31 |
| 300 | 328 | 15 | 394 | 424 | 20 | | | 6.04 |
| 350 | 360 | 15 | 426 | 456 | 20 | | | 6.60 |
| 400 | 411 | 15 | 477 | 507 | 20 | | | 7.50 |
| 450 | 462 | 15 | 528 | 558 | 24 | | | 8.28 |
| 500 | 514 | 15 | 579 | 609 | 28 | | | 8.97 |
| 550 | X[1] | 15 | 629 | 659 | 28 | | [2] | 9.92 |
| 600 | 614 | 15 | 681 | 711 | 32 | | | 10.9 |
| 650 | X[1] | 15 | 731 | 761 | 32 | | [2] | 11.6 |
| 700 | 716 | 15 | 783 | 813 | 36 | | | 12.6 |
| 750 | X[1] | 15 | 833 | 863 | 40 | | [2] | 13.6 |
| 800 | 818 | 15 | 885 | 915 | 44 | | | 14.1 |
| 850 | X[1] | 15 | 935 | 965 | 44 | | [2] | 15.2 |
| 900 | 920 | 15 | 987 | 1017 | 48 | | | 15.8 |
| 950 | X[1] | 15 | 1037 | 1067 | 48 | | [2] | 16.5 |
| 1000 | 1022 | 15 | 1089 | 1119 | 52 | | | 17.5 |
| 1100 | 1126 | 15 | 1193 | 1223 | 60 | | | 19.1 |
| 1200 | 1226 | 15 | 1293 | 1323 | 64 | 18 | | 20.8 |
| 1300 | 1326 | 15 | 1393 | 1423 | 68 | | | 22.5 |
| 1400 | 1426 | 15 | 1493 | 1523 | 72 | | | 24.1 |
| 1500 | 1526 | 15 | 1593 | 1623 | 76 | | | 25.8 |
| 1600 | 1626 | 15 | 1693 | 1723 | 80 | | | 27.5 |
| 1700 | 1726 | 15 | 1793 | 1823 | 84 | | | 29.1 |
| 1800 | 1826 | 15 | 1893 | 1923 | 92 | | | 30.7 |
| 1900 | 1926 | 15 | 1993 | 2023 | 96 | | | 32.3 |
| 2000 | 2026 | 15 | 2093 | 2123 | 100 | | | 34.0 |
| 2100 | 2126 | 15 | 2193 | 2223 | 108 | | | 35.5 |
| 2200 | 2226 | 15 | 2293 | 2323 | 112 | | | 37.2 |
| 2300 | 2326 | 15 | 2393 | 2423 | 116 | | | 38.9 |
| 2400 | 2426 | 15 | 2493 | 2523 | 120 | | | 40.5 |
| 2500 | 2526 | 15 | 2593 | 2623 | 128 | | | 42.1 |
| 2600 | 2626 | 15 | 2693 | 2723 | 132 | | | 43.7 |
| 2700 | 2726 | 15 | 2793 | 2823 | 136 | | | 45.4 |
| 2800 | 2826 | 15 | 2893 | 2923 | 140 | | | 47.1 |
| 2900 | 2926 | 15 | 2993 | 3023 | 148 | | | 18.6 |
| 3000 | 3026 | 15 | 3093 | 3123 | 152 | | | 50.3 |

Dimensions in mm | 1) nominal width not in DIN 86044-2, the dimension is to be specified by the customer | 2) depending on the specification for the inner diameter d1

# Old and new flange systems in comparison

„Less is more!" - with the lowest mass of all systems the flanges according to DIN 86044-2 in connection with the gaskets according to DIN 86072-2 easily create the fulfillment of the requirements

## Flanges according to DIN 86044-1 with gaskets according to DIN 86072-1:

Advantages:
- System has been known for decades

Disadvantages:
- high leakage rate - according to the Federal Immission Control Act BImSchG, TA Luft no longer permissible
- larger bolts - higher torques

## Flanges according to DIN 86044-2 with gaskets according to DIN 86072-2:

Advantages:
- compact design - material and space saving - low weight, lower costs
- safe assembly - many small bolts instead of few large ones - lower torques, no flange deflection between the bolts
- quick assembly - due to the block construction (steel on steel), assembly can be carried out without frequent retightening - quickly lower assembly costs
- low leakage - the system meets the requirements of the Federal Immission Control Act (BImSchG) with TA Luft - no exhaust gas in the engine compartment
- resistant against vibrations - sealing element is in force shunt
- high operational safety - no effects due to creep relaxation of the gasket

Disadvantage:
- more care required when welding the flanges – vertical-down weld or back-step welding - change of procedure, is cost-neutral at the end

We supply gaskets according to DIN 86072-1 for the old flange system DIN 86044-1.
For the new system we supply both the gaskets according to DIN 86072-2 and the flanges according to DIN 86044-2.

We are able to help you even with short delivery dates due to our flexibility!

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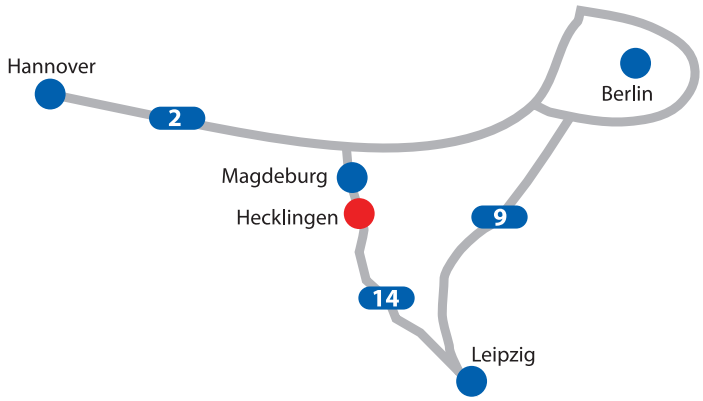
Use our ...

- experience
- technologies
- designs and calculations
- trainings
- cooperation partners




**Möller-Metalldichtungen GmbH** | Brunnenweg 10 | 39444 Hecklingen
phone:+49 3925 37890-0 | fax: +49 3925 930037
e-mail: moeller@moeller-md.de | www.moeller-md.de