

# GG Cam-Profile Gaskets



Our consistent quality - for your success!

# Cam-profile gaskets from Saxony-Anhalt

„Möller gaskets stand for highest quality at competitive prices. Our quality in cam-profile gaskets ensures reproducible sealing properties. This ensures plant safety and availability“.

## General Information

Cam-profile gaskets consist of a steel core holding the grooved profile machined into it. This cam-profile is then covered with a soft material layer tightly pressed into the grooves. Thus, a slim layer between the tips of the profile and the sealing area (flange surface) is created. Cam-profile gaskets are used in refineries, chemical and petrochemical plants as well as power stations. They are well suited for sealing of flanges with high pressure and thermal demands.

## Cam-profiles

We offer cam-profile gaskets in various designs. There are versions without centering rim (center ring), with fixed centering rim (MMD-GG-FG-CR) and with loose centering rim (loose center ring) (MMD-GG-FG-LC). In EN 1514-6 and EN 12560-6 the versions without centering ring are designated with NR, the ones with turned centering ring with IR and those with loose centering ring with LR. If this designation is added to the type designation, it can immediately be seen that this is a gasket for standardized flanges. For large temperature differences between the inner and outer diameters and for gaseous media, it is advisable to use a gasket with a loose centering ring or with a predetermined breaking groove in the centering ring for stress compensation and to reduce resonance vibrations and the associated risk of spontaneous fractures. For non-rigid flanges, the use of cam-profiles with support ring (MMD-GG-FG-BUR-FF) is recommended. Cam-profile gaskets without supports should not be used. The cam-profiles yielding under thermal alternating stresses can lead to a failure of the sealing system after only a few load changes (e.g. by starting and stopping the systems).

In general, cam-profile gaskets with layers (MMD-GG-FG) made of PTFE or graphite are used. Metallic layers of silver or aluminum are also used at very high operating temperatures. Cam-profile gaskets with soft-material layers are on the one hand characterized by a very low minimum surface pressure, which is determined by the material of the layer. On the other hand, the amount of the maximum tolerable surface pressure is very high, since this is determined by the value of the metallic carrier material.

Cam-profile gaskets cannot adapt to the flange blade inclination/rotation (warped flanges). The inner cams are turned lower in order to obtain the support up to the gasket center. The more compacted support in the center of the gasket results in a kind of cushion over which the flange can tilt.

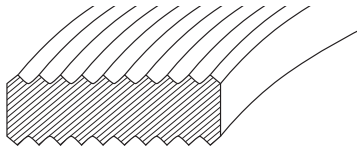
## Soft-material layers

The cam-profile gasket with supports provides the user with a gasket that can hardly be surpassed in the variety of possible applications combined with outstanding application safety. Depending on the layer thickness, usually 0.5 mm for graphite, density  $D = 1.0$ , the carrier material receives precisely defined cam-like grooves. The soft material layer is applied with a low chloride material, which is used as an adhesive due to its high adhesive strength. During assembly, the material of the soft layer presses itself into the cam valleys of the carrier material. The support and carrier are matched to each other in such a way that the cam tips are still completely covered with the material of the support in the operating state. The soft material overhang should be approx. 0.10 mm. Metallic contact and the associated risk of scoring in the flanges are avoided. The flow behavior of the soft material is largely suppressed by the chamfering of the support material in the grooves. This makes it possible to use the advantages of PTFE even under high pressures. In contrast to graphite layers, a smaller thickness must be selected for PTFE layers because their higher material density means that they cannot be compressed as much. A thickness of 0.35 mm with a density of  $D=1.0$  or 0.5 mm ePTFE has proven its worth. If this is not done, the soft material overhang for PTFE is approx. 0.2 to 0.3 mm. The result is the same flow and setting behavior as with PTFE flat gaskets. The current standards EN1514-6 and EN 12560-6 also require a layer thickness of 0.5 mm for PTFE.

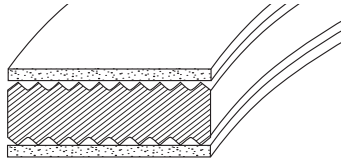
Incorrectly selected layer thicknesses lead to leakages, but at least to loosened screwed connections. They therefore pose a danger to the sealing system. The geometry of the cam-profiles is also standardized in such a way that it cannot be manufactured. A radius of 0.0 mm in the cam base, as required by DIN EN 1415-6, cannot be produced by the machines. The standard urgently needs to be revised. Many manufacturers use a „free“ geometry or produce according to the old DIN 2697, which can lead to expensive leaks.

Table on page 7

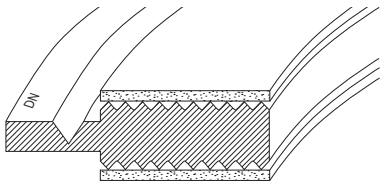
## Cam-profile overview



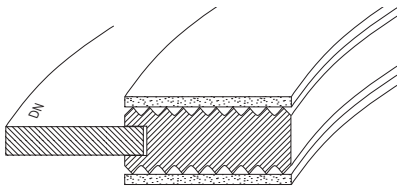
MMD-GG (without layers - grooved-gaskets)



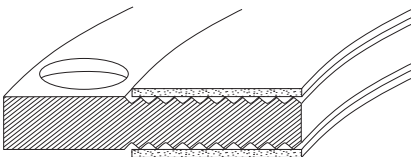
MMD-GG-FG (with layers)



MMD-GG-FG-CR (with layers and centering ring)

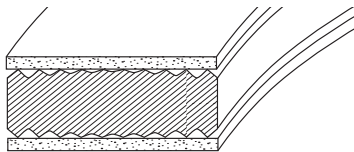


MMD-GG-FG-LC (with layers and loose centering ring)

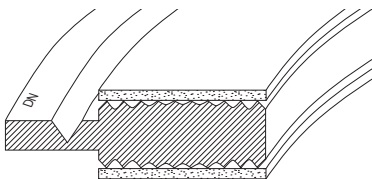


MMD-GG-FG-BUR-FF (with layers and support ring for smooth flanges)

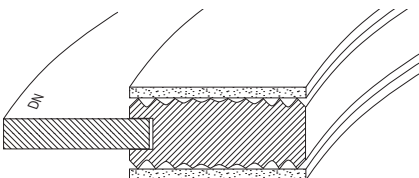
## Spherical-grooved gaskets



MMD-GGS-FG(-NR) (with layers, without centering ring)

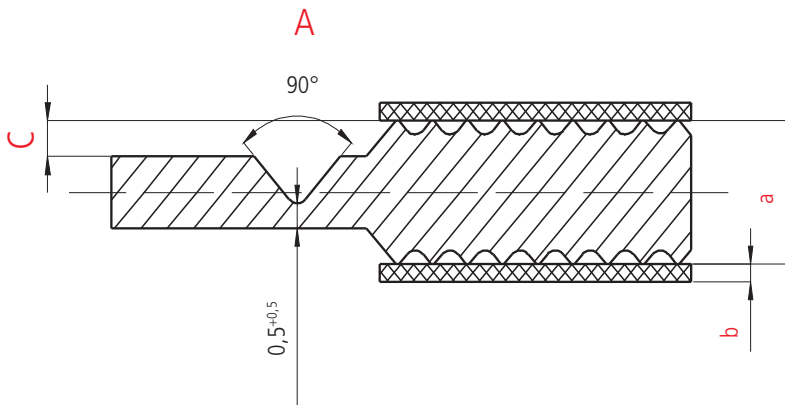
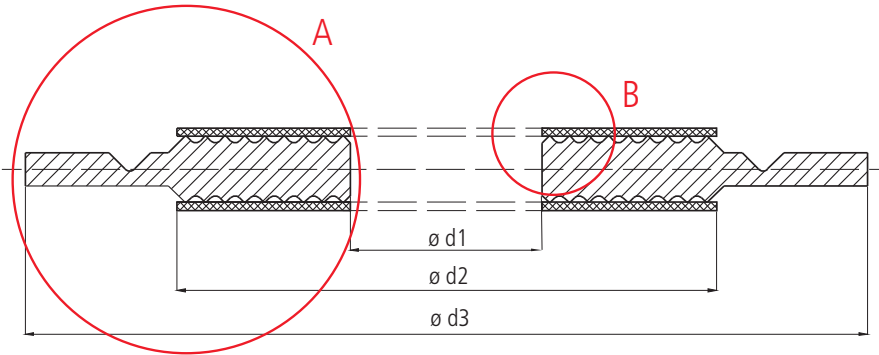


MMD-GGS-FG-C-(IR) (with layers and turned centering ring)

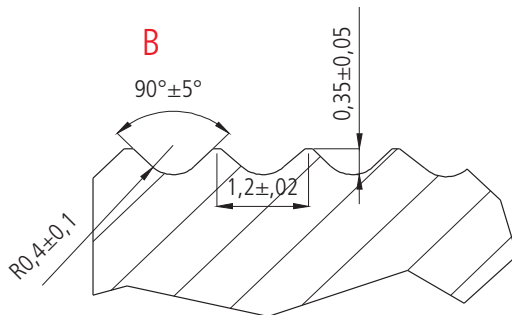


MMD-GGS-FG-LC-(LR) (with layers and loose centering ring)

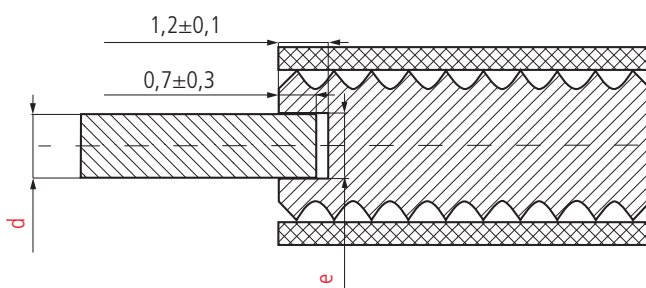
# Designs of the cam-profiles



With integrated centering ring and predetermined breaking point



Geometry of the cam-profile - MMD standard



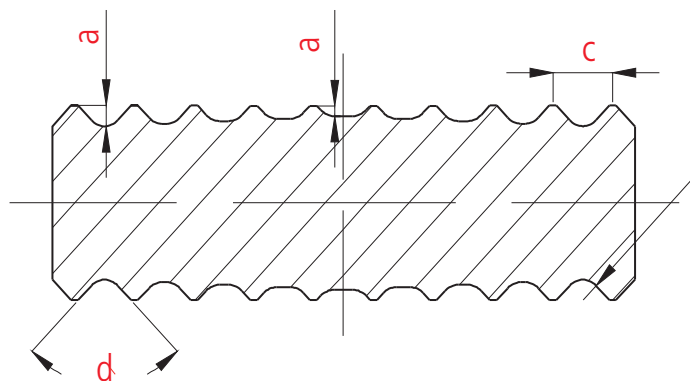
With loose centering ring

# Cam-profile geometry

Dimensions of the cam-profiles		
	Dimensions in mm	Dimensions in mm
a	Thickness of the metal core	4.0 +0/-0.3 3.0 +0/-0.3 <3.0 +0/-0.3
b	Thickness of the soft material support (supplier tolerances)	0.5 +0.05/-0
c	Distance from the centering ring to the tip of the cam - for gasket thickness 3 mm - for gasket thickness 4 mm	0.5 +0.5 0.5 +0.5
d	Thickness of the loose centering ring - for metal core 3 mm - for metal core 4 mm	1.0 ±0.07 1.5 ±0.09
e	groove width of the metal core - for metal core 3 mm - for metal core 4 mm	1.25 ±0.1 1.75 ±0.1

Predetermined breaking point is pierced at 7 mm width of the centering ring.

Dimensions of the CONVEX comb profiles		
	Dimensions in mm	Dimensions in mm
a	Depth from the crest - center - start/end	0.2±0.05 0.35±0.05
b	Radius in cam valley	R0.4±0.1
c	distance from cam	1.2±0.2
d	Angle of cam	90°±5°



# Materials - Overview

Materials and color code for gasket materials according to EN 1514-2, -4, -6, -7 and EN 12560-2, -6 with additions  
(common materials with material number in bold print)

Material <sup>1)2)</sup>	Material number	Material group	Designation	Color code EN1514 <sup>3)</sup>	Hardness HB	Temperature in °C		Spec. weight min. max g/cm <sup>3</sup>	
						min.	max		
Metallic material									
Unalloyed steel	general		CRS	silver	120	-10	450	7.85	
Soft Iron	1.1001		Soft Iron		max. 90	-60	450	7.85	
Soft iron StW24 mod. DD13 (StW 24)	1.0335	EN 10111	Soft Iron		max. 90			7.85	
DC01 /St 12)	1.0330	EN 10152	Low Carbon		max. 120	-10	450	7.75	
S235JGR2 (RSt37-2)	1.0038	EN 10305-2	36		130	-40	450	7.85	
P235GH (HI)	1.0345	EN 10028-2 Pressure vessel steel	C		130-180	-40	450	7.85	
P265GH (HII)	1.0425		60			-60	450		
P295 GH	1.0481		G			-60	480		
16Mo3 (15 Mo 3)	1.5415	EN 10028-2 Heat resistant pressure vessel steel	T1		140-170 150-180 130-180	-20	530	7.85	
13CrMo4-5	1.7335		11 / 12			-60	560		
10CrMo9-10	1.7380		22			-40	590		
12CrMo19-5G 12CrMo19-5V	1.7362	SEW 028 steel resistant to pressurized water VdTÜV Wb 004/1	5		130-220	-60	650	7.85	
P275NH (WStE 285)	1.0487	EN 10028-3 cold tough fine grained structural steel	A		130-180	-110	400	7.85	
P355NH (WStE 355)	1.0565		B						
P355NL1 (TStE 355)	1.0566		B						
P460NH (WStE 460)	1.8935								
X6Cr17	1.4016	EN 10088-1-3                10028-7 stainless steel	430	-	130-170	-20	350	7.70	
X4CrNi18-10	1.4301		304	yellow	120-170	-200	550	7.95	
X2CrNi19-11	1.4306		304L	-	120-170	-200	550	7.95	
X2CrNi18-9	1.4307		(304L)	-	120-170	-200	550	7.95	
X5CrNiMo17-12-2	1.4401		316	green	120-170	-200	550	7.95	
X2CrNiMo17-12-2	1.4404		316L	green	120-170	-200	550	7.95	
X2CrNiMoN17-11-2	1.4406		316LN	-	120-170	-200	550	7.95	
X2CrNiMo18-14-3	1.4435		317L	-	120-170	-200	550	7.95	
X2CrNiMo18-15-4	1.4438		317L	-	120-170	-200	550	7.95	
X2CrNiMoN17-13-5	1.4439		317LMN	-	120-170	-200	400	7.95	
X6CrNiTi18-10	1.4541		321	turquoise	130-190	-270	550	7.90	
X6CrNiNb18-10	1.4550		347	blue	130-190	-200	550	7.90	
X6CrNiMoTi17-12-2	1.4571		316Ti	-	130-190	-270	550	7.98	
X2CrNiN23	1.4362		EN 10028-7 Duplex-steel	A 2304		130-190	-200	250	7.85
X2CrNiMoN22-5-3	1.4462			182 F51	-				
X15CrNiSi20-12	1.4828		EN 10095 Heat resistant steel	309	-	130-190	-110	800	7.90
X15CrNiSi2520	1.4841	310		-	130-190	-110	800	7.90	
X10NiCrAlTi32-20	1.4876	IN 800		white	130-220	-110	850	8.00	
ECu57	2.0060	Copper			35-70	-270	350	8.93	
SF-Cu	2.0090							8.94	
CuZn37	2.0321	Brass / Ms63			60-100	-200	300	8.44	
Ni	2.4060	Nickel	Ni	red	80-150	-60	600	8.90	
Ni99.2	2.4066								
NiCu30Fe	2.4360	z.B. Monel 400	MON	orange brown	100-160	-60	500	8.88	
NiMo28	2.4617		z.B. Hasteloy B2 VdTÜV Wb 436	B333		200	-29	425	9.22
NiCr20CuMo	2.4660	z. B. Inconel 600 z.B. Hasteloy C276 VdTÜV Wb 400 z.B. Inconel 625 VdTÜV Wb 499 z.B. Inconel 825 VdTÜV Wb 432/1	A-20	black	140-200 160	-60 -29	600 535	8.42 8.89	
NiCr15Fe7TiAl	2.4669		INX	-					
NiCr15Fe	2.4816		INC 600	gold					
NiMo16Cr15W	2.4819		B575	beige					
NiCr22Mo9Nb	2.4856		B443	gold					
NiCr21Mo	2.4858	B424	white	200	-29	62	8.44		
Ti (99.8)	3.7025	Titanium 1	1	purple	110-160	-60	300	4.50	
Ti (99.97)	3.7035		Titanium 2	2	purple	120-180	-60	350	4.50
Aluminum	-		Al		20-45	-250	300	2.70	
Ag 99.97		Fine silver FK-Silver	Ag		25-45 HV	-270	750	10.50	
Ag 99.85 Ni 0.15					45-65 HV				
Zirconium	-		ZIRC	-					

1) old designation in brackets • 2) common steels printed in bold • 3) materials without color or line (-) are not mentioned in the standards.

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 | date of: 15.01.2021 | Rev.: 02

# Soft material layers – Overview

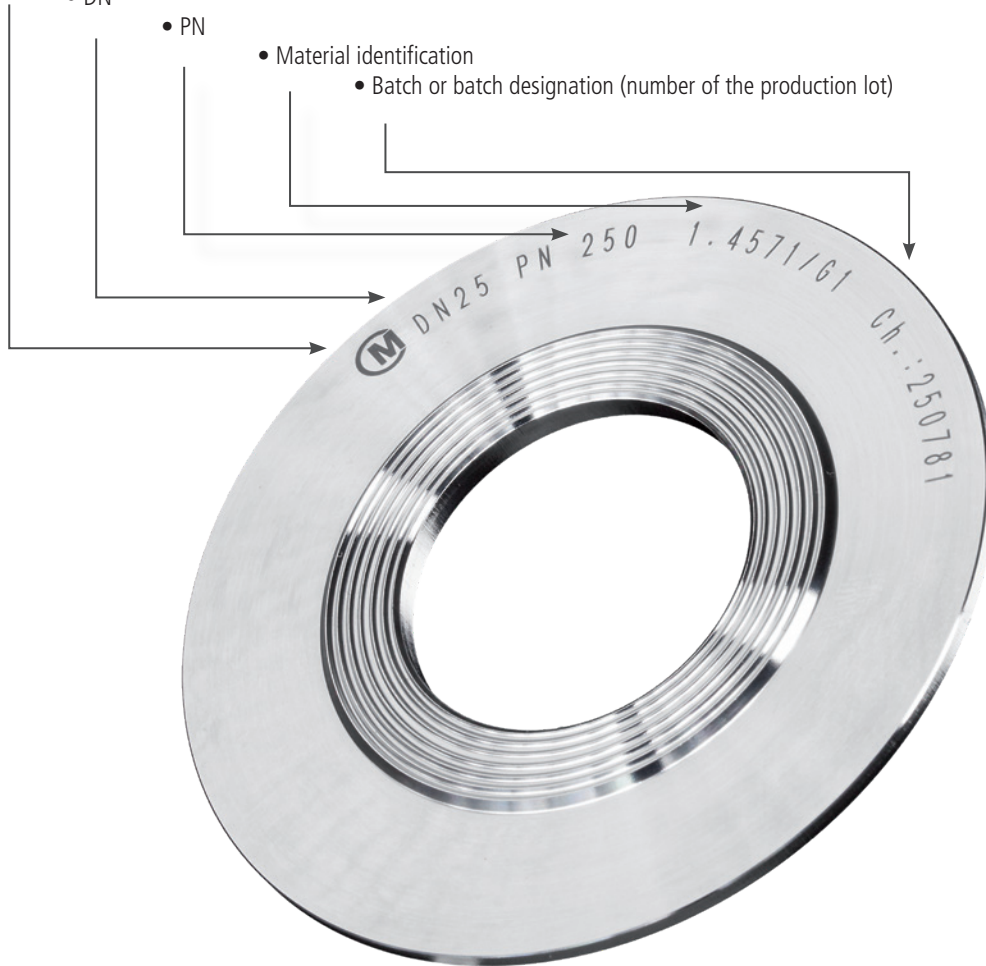
Materials and color code for gasket materials according to EN 1514-2, -4, -6, -7 and EN 12560-2, -6 with additions (common materials with material number in bold print)								
Material <sup>1)2)</sup>	Material number	Material group	Designation	Color code EN1514 <sup>3)</sup>	Hardness HB	Temperature in °C		Spec. Weight g/cm <sup>3</sup>
						min.	max	
<b>Non-metallic material</b>								
Chrysotile-asbestos <sup>4)</sup>			ASB	no stripes		-60	550	
PTFE / ePTFE			PTFE	white stripes		-200	230	
Mica (micaceous graphite)			Manufacturer name	pink stripes		-40	900	
More flexible Graphite			FG.	grey stripes		-200	500	
Ceramics <sup>4)</sup>			CER	light green strip		-40	1.000	

- 1) Old designation in brackets
- 2) Common steels in bold print
- 3) Materials without color or line (-) are not mentioned in the standards
- 4) Use prohibited or restricted in Europe, observe regional rules

## Our seals are marked:

The marking is made near the outer edge with the following information.

- Manufacturer's mark
- DN
- PN
- Material identification
  - Batch or batch designation (number of the production lot)



# Cam-profile gaskets for flanges DN

Dimensions for grooved gaskets according to EN 1514-6 for flanges form A (smooth) and form B (with sealing strip) according to EN 1092-1 (DIN 2627 to 2638, without 2630 and 2631) PN 10 to PN 400														
DN	Dimensions of the sealing element				Outer Ø of the centering ring									
	Inner Ø	PN 10/40	PN 64/160	PN 250/400	PN 10	PN 16	PN 25	PN 40	PN 64	PN 100	PN 160	PN 250	PN 320	PN 400
10	22		36			46				56			67	
15	26		42			51				61			72	
20	31		47			61				72 <sup>1)</sup>				
25	36		52			71				82		83	92	104
32	46		62	66		82				88 <sup>1)</sup>				
40	53		69	73		92				103		109	119	135
50	65		81	87		107				113	119	124	134	150
65	81		100	103		127				137	143	153	170	192
80	95		115	121		142				148	154	170	190	207
100	118		138	146		162	168			174	180	202	229	256
125	142		162	178		192	194			210	217	242	274	301
150	170		190	212		217	224			247	257	284	311	348
175	195		215	245		247	254	265		277	284	316	358	402
200	220	240	248	280		272	284	290	309	324	358	398	442	
250	270	290	300	340	327	328	340	352	364	388	442	488		
300	320	340	356	400	377	383	400	417	424	458	536			
350	375	395	415		437	443	457	474	468	512				
400	426	450	474		489	495	514	546	543	572				
450	480	506			539	555	564 <sup>1)</sup>	571						
500	530	560	588		594	617	624	628	657	704				
600	630	664	700		695	734	731	747	764	813				
700	730	770	812		810	804	833	852	879	950				
800	830	876	886		917	911	942	974	988					
900	930	982	994		1017	1011	1042	1084	1108					
1000	1040	1098	1110		1124	1128	1154	1194	1220					
1200	1250	1320	1334		1341	1342	1364	1398	1452					
1400	1440	1522			1548	1542	1578	1618						
1600	1650	1742			1772	1764	1798	1830						
1800	1850	1914			1972	1964	2000							
2000	2050	2120			2182	2168	2230							
2200	2250	2328			2384	2378								
2400	2460	2512			2594									
2600	2670	2728			2794									
2800	2890	2952			3014									
3000	3100	3166			3228									

Dimensions in mm

**Note:**

PN 64 is named PN 63 in the current flange standard EN 1092-1 - analogous to the flange standards.

There are no dimensions according to EN 1092-1 for dimensions where the outside and centering diameters are printed in italics 1)

Dimensions added



# Cam-profile gaskets for flanges Class

Dimensions for cam-profile gaskets according to EN 12560-6 for flanges Form RF Raised-Face (with sealing strip) according to EN 1759-1 (ASME B16.5) in Class 150, 300, 400, 600, 900, 1500, 2500										
Nominal width	Dimension of the sealing element		Outer Ø of the centering ring							
	NPS	Ø inside	Ø outside	150	300	400	600	900	1500	2500
1/2	23.0	33.3	44.4		50.8			60.3		66.7
3/4	28.6	39.7	53.9		63.5			66.7		73.0
1	36.5	47.6	63.5		69.8			76.2		82.5
1 1/4	44.4	60.3	73.0		79.4			85.7		101.6
1 1/2	52.4	69.8	82.5		92.1			95.2		114.3
2	69.8	88.9	101.6		108.0			139.7		142.8
2 1/2	82.5	101.6	120.6		127.0			161.9		165.1
3	98.4	123.8	133.4		146.1			165.1	171.5	193.7
3 1/2	111.1	136.5	158.8	161.9	158.7					
4	123.8	154.0	171.5	177.8	174.6	190.5	203.2	206.4	231.7	
5	150.8	182.6	193.7	212.7	209.5	238.1	244.5	250.8	276.2	
6	177.8	212.7	219.1	247.7	244.5	263.5	285.8	279.4	314.3	
8	228.6	266.7	276.2	304.8	301.6	317.5	355.6	349.3	384.1	
10	282.6	320.7	336.5	358.8	355.6	396.9	431.8	431.8	473.0	
12	339.7	377.8	406.4	419.1	415.9	454.0	495.3	517.5	546.1	
14	371.5	409.6	447.7	482.6	479.4	488.9	517.5	574.7		
16	422.3	466.7	511.2	536.6	533.4	561.9	571.5	638.1		
18	479.4	530.2	546.1	593.7	590.5	609.6	635.0	701.7		
20	530.2	581.0	603.2	650.9	644.5	679.5	695.3	752.4		
22	581.0	631.8	657.2	701.7	698.5	730.3				
24	631.8	682.6	714.4	771.5	765.2	787.4	835.0	898.5		

Dimensions in mm

# Cam-profile according to ASME B16.20

Dimensions for grooved gaskets according to ASME B16.20 for flanges according to ASME B16.5 / from 26" - table page 11

Nominal width NPS	Dimension of the sealing element		Outer Ø of the centering ring d3 (3)						
	Ø inside d1 (1)	Ø outside d2 (2)	150	300	400	600	900	1500	2500
1/2	23.1	33.3	47.8	54.1	Note (4)	54.1	Note (5)	63.5	69.9
3/4	28.7	39.6	57.2	66.8	Note (4)	66.8	Note (5)	69.9	76.2
1	36.6	47.5	66.8	73.2	Note (4)	73.2	Note (5)	79.5	85.9
1 1/4	44.5	60.2	76.2	82.6	Note (4)	82.6	Note (5)	88.9	104.9
1 1/2	52.3	69.9	85.9	95.3	Note (4)	95.3	Note (5)	98.6	117.6
2	69.9	88.9	104.9	111.3	Note (4)	111.3	Note (5)	143.0	146.1
2 1/2	82.6	101.6	124.0	130.3	Note (4)	130.3	Note (5)	165.1	168.4
3	98.3	123.7	136.7	149.4	Note (4)	149.4	168.4	174.8	196.9
4	123.7	153.9	174.8	181.1	177.8	193.8	206.5	209.6	235.0
5	150.9	182.6	196.9	215.9	212.9	241.3	247.7	254.0	279.4
6	177.8	212.6	222.3	251.0	247.7	266.7	289.7	282.7	317.5
8	228.6	266.7	279.4	308.1	304.8	320.8	358.9	352.6	387.4
10	282.7	320.8	339.9	362.0	358.9	400.1	435.1	435.1	476.3
12	319.6	377.7	409.7	422.4	419.1	457.2	498.6	520.7	549.4
14	377.6	409.7	450.9	485.9	482.6	492.3	520.7	577.9	Note (6)
16	422.4	466.6	514.4	539.8	536.7	565.2	574.8	641.4	Note (6)
18	479.3	530.1	549.4	596.9	593.9	612.9	638.3	704.9	Note (6)
20	530.1	580.9	606.6	654.1	647.7	682.8	698.5	755.7	Note (6)
24	631.7	682.5	717.6	774.7	768.4	790.7	838.2	901.7	Note (6)

Dimensions in mm

- (1) Inner diameter (d1) - tolerance  $\pm 0.8$  mm
- (2) Outer diameter (d2) - tolerance  $\pm 0.8$  mm
- (3) Outer diameter of centering ring - tolerance  $\pm 0.8$  mm
- (4) There are no Class 400 flanges in NPS 1/2" to NPS 3", use Class 600
- (5) There are no Class 900 flanges in NPS 1/2" to NPS 2 1/2", use Class 1500
- (6) There are no Class 2500 flanges in NPS 14 and larger

# Cam profile according to ASME B16.20

Dimensions for grooved gaskets according to ASME B16.20 for flanges according to ASME B 16.47 Form A															
Nominal width NPS	Class 150			Class 300			Class 400			Class 600			Class 900		
	Dimensions of the sealing element Ø inside d1 (1)	Ø outside d2 (2)	Centering ring Ø outside d3 (3)	Dimensions of the sealing element Ø inside d1 (1)	Ø outside d2 (2)	Centering ring Ø outside d3 (3)	Dimensions of the sealing element Ø inside d1 (1)	Ø outside d2 (2)	Centering ring Ø outside d3 (3)	Dimensions of the sealing element Ø inside d1 (1)	Ø outside d2 (2)	Centering ring Ø outside d3 (3)	Dimensions of the sealing element Ø innen d1 (1)	Ø outside d2 (2)	Centering ring Ø outside d3 (3)
26	673.1	704.9	774.7	685.8	736.6	835.2	685.8	736.6	831.9	685.8	736.6	866.9	689.8	736.6	882.7
28	723.9	755.7	831.9	736.6	787.4	898.7	736.6	787.4	892.3	736.6	787.4	914.4	736.6	787.4	946.2
30	774.7	806.5	882.7	793.8	844.6	952.5	793.8	844.6	946.2	793.8	844.6	971.6	793.8	844.6	1009.7
32	825.5	860.6	939.8	850.9	901.7	1006.6	850.9	901.7	1003.3	850.9	901.7	1022.4	850.9	901.7	1073.2
34	876.3	911.4	990.6	901.7	952.5	1057.4	901.7	952.5	1054.1	901.7	952.5	1073.2	901.7	952.5	1136.7
36	927.1	968.5	1047.8	955.8	1006.6	1117.6	955.8	1006.6	1117.6	955.8	1006.6	1130.3	958.9	1009.7	1200.2
38	977.9	1019.3	1111.3	977.9	1016.0	1054.1	971.6	1022.4	1073.2	990.6	1041.4	1104.9	1035.1	1085.9	1200.2
40	1028.7	1070.1	1162.1	1022.4	1070.1	1114.6	1025.7	1076.5	1127.3	1047.8	1098.6	1155.7	1098.6	1149.4	1251.0
42	1079.5	1124.0	1219.2	1073.2	1120.9	1165.4	1076.5	1127.3	1178.1	1104.9	1155.7	1219.2	1149.4	1200.2	1301.8
44	1130.3	1178.1	1276.4	1130.3	1181.1	1219.2	1130.3	1181.1	1231.9	1162.1	1212.9	1270.0	1206.5	1257.3	1368.6
46	1181.1	1228.9	1327.2	1178.1	1228.9	1273.3	1193.8	1244.6	1289.1	1212.9	1263.7	1327.2	1270.0	1320.8	1435.1
48	1231.9	1279.7	1384.3	1235.2	1286.0	1324.1	1244.6	1295.4	1346.2	1270.0	1320.8	1390.7	1320.8	1371.6	1485.9
50	1282.7	1333.5	1435.1	1295.4	1346.2	1378.0	1295.4	1346.2	1403.4	1320.8	1371.6	1447.8	(4)	(4)	(4)
52	1333.5	1384.3	1492.3	1346.2	1397.0	1428.8	1346.2	1397.0	1454.2	1422.4	1498.6	(4)	(4)	(4)	(4)
54	1384.3	1435.1	1549.4	1403.4	1454.2	1492.3	1403.4	1454.2	1517.7	1428.8	1479.6	1555.8	(4)	(4)	(4)
56	1435.1	1485.9	1606.6	1454.2	1505.0	1543.1	1454.2	1505.0	1568.5	1479.6	1530.4	1612.9	(4)	(4)	(4)
58	1485.9	1536.7	1663.7	1511.3	1562.1	1593.9	1505.0	1555.8	1619.3	1536.7	1587.5	1663.7	(4)	(4)	(4)
60	1536.7	1587.5	1714.5	1562.1	1612.9	1644.7	1568.5	1619.3	1682.8	1644.7	1644.7	1733.6	(4)	(4)	(4)

Dimensions in mm

- (1) Inner diameter (d1) - tolerance of NPS 26-34 ± 0.8 mm, tolerance of NPS 36-60 ± 1.5 mm
- (2) Outer diameter (d2) - tolerance of from NPS 26-60 ± 1.5 mm
- (3) Outer diameter of centering ring (d3) - tolerance ± 0.8 mm
- (4) There are no flanges from NPS 50 and up and larger

# Cam-profile also with sealing bars or as frames

We also manufacture cam-profile gaskets in frame shapes. The installation of sealing bars is possible with any type of cam-profile gaskets. For example, cam-profile gaskets with sealing bars are used in heat exchangers. For the production of such gaskets a drawing or sample from the customer is required.

## Order example:

according to standard with layer and centering ring:  
**MMD-GG-FG-CR**  
DN80  
PN 10-40 nach EN 1514-6  
1.4541/graphite total 5 mm

Orders are also possible after provision of sample gasket or according to drawing.

## Satisfied customers are our incentive!

We achieve this, because we are committed to the needs of our consumers, we listen to them and produce exactly the metal gaskets that exactly meet their requirements for pressure, temperature and medium resistance.

## Your advantages

- most modern production technologies
- every gasket tested and certified
- technical consulting and training
- all orders shipped within 24 hours
- fast assembly due to high fitting accuracy
- All gaskets are guaranteed Made in Germany!

## Use our ...

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



**Möller-Metalldichtungen GmbH** | Brunnenweg 10 | 39444 Hecklingen  
Tel.: +49 3925 37890-0 | Fax: +49 3925 930037  
E-Mail: [moeller@moeller-md.de](mailto:moeller@moeller-md.de) | Internet: [www.moeller-md.de](http://www.moeller-md.de)