



Sanitary Seals / Gaskets

For Pipe Couplings

Contents

03 About M Seals

04 Gasket Material Guide

06 Tri-Clamp Gasket

07 Ordering Codes

18 M-Quick™

19 FEP Encapsulated O-Rings

Sanitary Gaskets for Pipe Couplings

Specifically for use in stainless pipe systems in the food, pharma and chemical industries, we stock a range of gaskets including:

- DS
- DIN 11851
- DIN 11864
- SMS 1149
- ISO2853

As well as clamp-types:

- ISO2852
- B54825/3
- ISO1127
- DIN32676 and others.

Most of them can be supplied in EPDM, NBR, FPM, VMQ, Kalrez and PTFE, all meeting the requirement of EU1935/2004 (for PTFE also EU10/2011) and FDA for use with foodstuff.

Several materials are also tested and certified against USP <87> and <88> Class VI and 3A.



About M Seals

Expert Sealing Solutions Designed for Industrial Performance.

M Seals is an international company founded in 1963 in Denmark, with offices in Sweden, the UK, Poland, Finland and China. Our many years of experience and knowledge make us a preferred sealing solutions supplier for customers worldwide.

We specialise in the design, manufacture and supply of sealing components and offer a comprehensive range of products tailored to different applications and industries. Our products range from standard seals, with thousands in stock for next day delivery, to customised solutions that meet specific requirements and special environmental conditions.

In 2007, M Seals became a part of Diploma PLC, giving us access to extensive resources and support. This affiliation allows us to offer expert advice, innovative solutions, and high-quality service, benefiting from shared knowledge and best practices within the group. This ensures we stay at the forefront of industry developments and deliver exceptional value to our customers.

Knowledge

We have developed extensive knowledge of seals and their applications, including their composition, lifetime and suitability for a specific job. The right choice of seal minimises the risk of unexpected breakdowns, so our team can advise on the best solution to save you from potential future issues.

We can make recommendations from our wide range of stocked seals or work with your specific requirements to design a bespoke sealing solution. Our team use their technical knowledge and experience to provide the best service to our customers.

Quality Assurance

We ensure high-quality sealing products through careful control and evaluation, and we are proud to have achieved several ISO certifications, including ISO9001:2015, ISO14001:2015, ISO45001:2018 and AS EN 9120:2018.

We also conform to many industry specific regulations, ensuring our sealing products comply to specific requirements and full traceability is maintained throughout the product lifecycle.



Gasket Material Guide

The below suitability and restrictions must be taken into consideration for products used in food and drug applications. This is general guidance on seal material selection; please contact us for technical support.

EPDM

Good resistance to alcohol, ketones, mineral acids and alkalis. Suited for CIP. Not suited with oils and hydrocarbons and fatty foods. Not recommended for milk fat concentrations higher than 8%.
Temperature range from -40°C to +140°C.

FPM/FKM

High resistance to most commonly used chemicals in food, dairy and pharmaceutical applications. Not suited in ketones, esters, hot concentrated caustic solutions or steam.
Temperature range from -20°C to +200°C.

VMQ (Silicone)

Chemical resistant to most commonly used chemicals in food, dairy and pharmaceutical applications. Good resistance to oxidizing agents, alkali solutions, animal and vegetable fat. Not recommended in steam, strong acids and alkaline. Low mechanical properties.
Temperature range from -60°C to +200°C.

NBR

Good resistance to oils, mineral fats and water. Not recommended for CIP.
Temperature range -30°C to 100°C.

PTFE (Virgin)

Universal chemical resistance. Caution to be taken for cold flow and over-tightening.
Temperature range from -100°C to +250°C.

PTFE/SS (Stainless)

Universal chemical resistance. Caution to be taken for cold flow and over-tightening.
Temperature range from -100°C to +250°C.

PTFE (Envelope)

Universal chemical resistance. Composite gasket, outer PTFE shell and inner FPM insert providing elasticity.
Temperature range from -20°C to +200°C.

The results given are obtained on standard specimens following standard test procedures and are not comparable to finished products due to differences in the products profile. It is the customer's responsibility to evaluate parts prior to use in order to assure that parts will perform satisfactorily in their application.



Gasket Material Guide

Material/Code	Comply with	Colour
EPDM/400	FDA CFR21:177.2600 (e+f)/ USP Class VI <88> 70°C / GB4806.11 3-A 18-03 Class II	Black
EPDM/300	FDA CFR21:177.2600 (e+f)/ USP Class VI <88> 121°C / and USP <87> 3-A 18-03 Class II	Black
EPDM/304	FDA CFR21:177.2600 (e+f)	Black
FPM/020	FDA CFR21:177.2600 (e+f)	Black
FPM/300	FDA CFR21:177.2600(e+f) / USP Class VI <88> 70°C / 3-A 18-03 Class I	Green
FPM/310	FDA CFR21:177.2600 (e+f)	Black
Kalrez/KZ6230	FDA CFR21:177.2600 / USP<88>Class VI 121°C / 3A 18-03 Class I	Black
NBR/001	FDA CFR21:177.2600(e+f)/USP<88>Class VI 70°C / 3A 18-03 Class II	Black
NBR/006	FDA CFR21:177.2600 (e+f) / 3A 18-03 Class II	Blue
NBR/305	FDA CFR21:177.2600 (e+f)	Black
PTFE/598	FDA CFR21:177.1550 / USP<88>Class VI 121°C / 3A 20-27 / EU10/2011 GB 4806.7-2016	White
PTFE/530	FDACFR21:177.1550 / USP Class VI <87> <88>121°C / 3A 20-27 / EU10/2011	Grey
VMQ/300	FDA CFR21:177.2600 (e+f) / USP Class VI <87> <88>121°C GB 4806.7-2016 / GB31604.1-2016	White
VMQ/600	FDA CFR21:177.2600 (e+f)/USP<88>Class VI 70°C / 3A 18-03 Class II / European Pharmacopoeia 2019 (9.6) Chapter 3.1.9	Transparent
VMQ/001	FDA CFR21:177.2600 (e+f) / GB 4806.11-2016	Transparent
FEP	FDA CFR21: 177.300 / EU 10/2011 / USP<88> Class VI 121°C Core: VMQ(red) or FPM(black) FDA CFR21:177.2600	Transparent

All materials above are in compliance with EU1935/2004 and EU2023/2006. Other materials available on request.

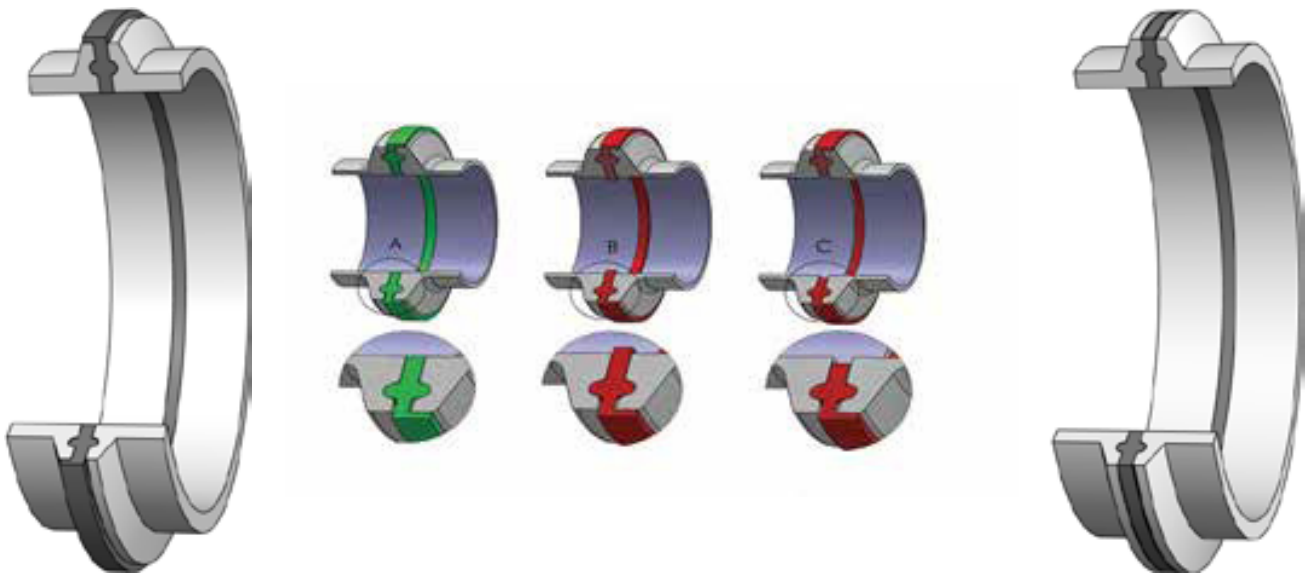
In accordance with FDA cfr21: 177.2600(g), Good manufacturing practice, rubber articles intended for contact with food must be thoroughly cleaned prior to food contact.

Pressure rating: According to the specification of the coupling manufacturer.



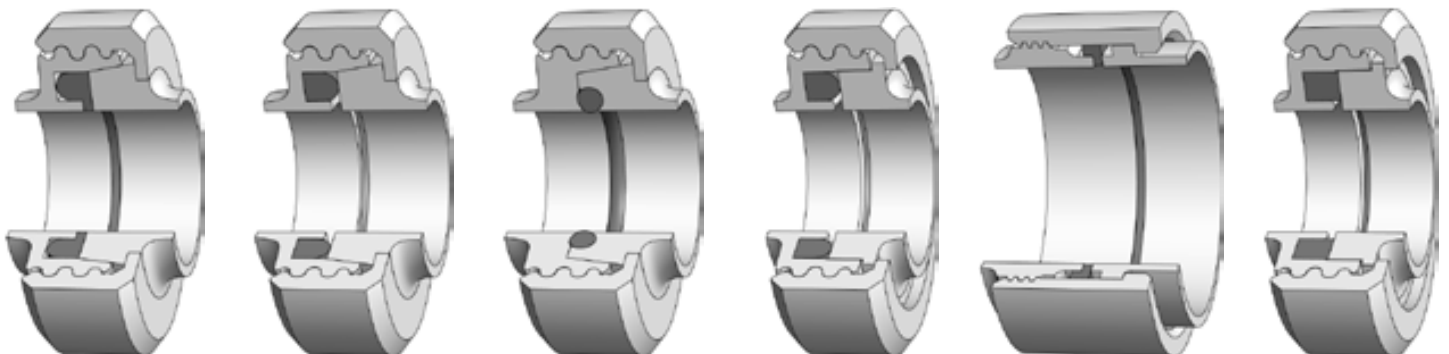
Tri-Clamp Gasket

Clamp gasket types, such as DIN32676, ISO2852, ISO1127 and MINI are designed so that - if used correctly - the gasket will be almost flush with the inner diameter of the coupling. In this way, no residue can build up and cause hygiene problems. Please follow the assembly instructions of the coupling manufacturer for tightening torque, lubrication etc.



- A The coupling is correctly assembled and tightened.
- B The gasket size is wrong or the gasket has been overtightened
- C The gasket size is wrong or the gasket is not tightened enough.

Other Connection Types



11851 Collar

DIN 11851
Standard/
High

DIN 11864

DS

ISO 2853

SMS 1149



Ordering Codes

DIN32676 LIPPED



DN	Tube ID	Flange	EPDM/400	VMQ/300	VMQ/600	FPM/300	NBR/001	PTFE 598	PTFE 598/ FPM	PTFE 598/ EPDM	PTFE/530
6	6	34	1018150		425618				1031040		
8	8	34	425783		425676			1030540	1014223		
10	10	34	425466	425663	425643	425498		425700	425927		
15	16	34	425467	425662	425644	425444	425000	425626	425926	1005505	
15/1	16	50.5	425777		1006337						
20	20	35	425465	425474	425645	425445	425468	425625	1010210	1005347	
20/1	20	50.5	425778		1000084	1005010					
1"	22.1	50.5	425744		425747	425750	1012556	1013292	1004689		
25	26	50.5	425475	425477	425646	425476	425947	425453	1002359	1025475	
32	32	50.5	425478		425619	425479	425948	425624	425703	1008899	
11/2"	34.8	50.5	425745		425748	425751	1012557	425957	1004692		
40	38	50.5	425480	425481	425648	425482	1005867	425454	425921	1001270	
2"	47.5	64	425746		425749	425752	1012558		1014771		
50	50	64	425483	425484	425649	425493	425949	425455	1004694		
65	66	91	425485	425499	425650	425486	425950	425934	425920		
80	81	106	425487	425664	425651	425711	1012559	425955	1000013		
100	100	119	425489	425504	425652	425488	425770	425956	1004687		
125	125	155	425636		425952		425951	425929	1007843		
125-NS	125	144.5	1001472								
150	150	183	425637		425954	425490	425953	425933	425923		
150-NS162	150	167	1001475								
162	162	183			1001426						
200	200	233.5	425627		1005852		425720		425688		
200-NS	200	217.5	1001476								

ISO2852 LIPPED

DN	Tube ID	Flange	EPDM/400	VMQ/300	VMQ/600	FPM/300	NBR/001	PTFE 598	PTFE 598/ FPM	PTFE 598/ EPDM	PTFE/530
21.3	19.3	34	1003985								
25	22.6	50.5	425401	425390	425540	425396	425400	425522	425530	1001790	
38	35.6	50.5	425403	425391	425541	425397	425402	425521	425531	1003551	
51	48.6	64	425405	425392	425542	425398	425404	425520	425532	1003936	
63.5	60.3	77.5	425407	425393	425543	425434	425406	425523	425533	1005184	
76.1	72.9	91	425409	425394	425544	425433	425408	425524	425534	1005186	
88.9	84.9	106	425451					425622			
101.6	97.6	119	425411	425395	425545	425446	425410	425525	425535	1005191	
114.3	109.1	130	425638		425653	425733	425729			1001463	
127	120	144.5	425639		425654		1012899	1002800			
139.7	135.7	155	425735			425734	425736				
152.4	147	167	425640		425655			425928			
168.3	163.1	183	425399			425718	425726	425526	425753		
203.2	198	217.5	425641		425656			1006103			
219.1	213.9	233.5	425497			425732	425427	425658	425492		
254	250	268	425642		425657						
304.8	299.8	319	425757								



Ordering Codes

DIN32676 UNLIPPED



DN	Tube ID	Flange	EPDM/400	VMQ/600	FPM/300	PTFE 598	PTFE 598/FPM	PTFE 598/EPDM	PTFE/530
6	6	34							
8	8	34	1013898						
10	10	34	1001843	425784	1001844		1013911		
15	16	34	1001846	1001576	1001848	1011896	1013910		
15/1	16	50.5	1022977						
20	20	35	1001853	1001361	1001854	1025746	1004693	1029748	
20/1	20	50.5	1025151						
1"	22.1	50.5	1010378	1016731			1024166		
25	26	50.5	1001888	425785	1001889	1025749	1013912		
32	32	50.5	1001893	1001928	1001929	425689	1033060		
11/2"	34.8	50.5	1001991	1001992	1001993	1033590	1024167		
40	38	50.5	1001996	1001997	1001998		1007878	1012001	
2"	47.5	64	1007695	1014757			1024168		
50	50	64	1002022	1002023	1000579	1031976			
65	66	91	1002060	1002061	1002062				
80	81	106	1002067	425570	425287		1008646		
100	100	119	1030377	1024494			1035221		
125	125	155							
125-NS	125	144.5							
150	150	183	1030378						
150-NS162	150	167							
162	162	183							
200	200	233.5							
200-NS	200	217.5							

ISO2852 UNLIPPED

DN	Tube ID	Flange	EPDM/400	VMQ/600	FPM/300	PTFE 598	PTFE 598/FPM	PTFE 598/EPDM	PTFE/530
21.3	19.3	34	1010727						
25	22.6	50.5	425776	1001884	1001885	1002760	1031034		
38	35.6	50.5	1001449	1000713	1001995	1011114	1005460	1007190	
51	48.6	64	1002020	1001393	1002021			1007191	
63.5	60.3	77.5	425460	1002039	1002040		1024169	1007192	
76.1	72.9	91	425538	1000714	1002066	1004119	1024170		
88.9	84.9	106							
101.6	97.6	119	425459	425782	425781	1012388	1024171	1007193	
114.3	109.1	130				425528			
127	120	144.5					1030186		
139.7	135.7	155	1000678						
152.4	147	167	425788	1033115		1033591			
168.3	163.1	183							
203.2	198	217.5					1019496		
219.1	213.9	233.5							
254	250	268	1012217						
304.8	299.8	319							



ISO1127 LIPPED



DN	Tube ID	Flange	EPDM/400	VMQ/300	VMQ/600	FPM/300	NBR/001	PTFE 598	PTFE 598/ FPM	PTFE 598/ EPDM	PTFE/530
8\1	10.3	34				1000264					
8	10.3	50.5	425593		425580						
10\1	14	34	425687		425922	1000265			1014224		
10	14	50.5	425594		425581						
15\1	17.9	34	425945		425596			1010208			
15	18.1	34	1002415			1000266					
15	18.1	50.5	425576		425582	425679		425607	1004688		
20	237	50.5	425595		425583	425680	1012276	425610	1004690		
25	29.7	50.5	425597		425584	425681		425611	1004691		
32	38.6	64	425598		425585	425682		425621	1004695		
40	44.3	64	425577		425579	425683		425612	1001706		
50	56.3	77.5	425599		425586	425684		425606	425719	1002238	
65	72.1	91	425628		425587	425685		425701	1004696	1010195	
80	84.3	106	425635		425588	425686		425702	1004686		
100	109.7	130	425630		425589	1000269		1004328	1000296		
150	163.1	182.7	425631		425590						
200	213.9	233.5	425632		425591						
250	266.3	287.5	425633		425629						
300	315.9	338.3	425634		425592			1027164			

MINI CLAMP



DN	Tube ID	Flange	EPDM/400	VMQ/300	VMQ/600	FPM/300	NBR/001	PTFE 598	PTFE 598/ FPM	PTFE 598/ EPDM	PTFE/530
	0	25.4	425614		425550			425473			
3	3	25.4	1011429								
4\1	4	25.4	425556		425571			1030579		1033171	
	4.57	25.4			1031995			1003134			
8\1	6	25.4	425557		425674			425472		1004748	
6.5\1	6.3	25.4	425698								
8\2	8	25.4						1010961	1005033	1004749	
8\4	8	25.4	425555		425554						
12.7\1	9.4	25.4	425558		425559	1001093	1012543	425661	1016354		
12\2	9.7	25.4						425469			
10\2-12\2	10	25.4	425672		1027652	425671		1004343	425613	1004750	
12.7	10.3	25.4	425449	425456	425755	425452		425567	1016884		
11	11	25.4						425082			
11.3	11.3	25.4	425706		1030401	425704					
12\1	12	25.4	425668		1002705	425699		425623		1004751	
10\1	12.3	25.4	425496								
13	16	25.4	425464								
14\2	14	25.4	425666			425667		425568	425572		
14\3	14	25.4	425551		425552						
14.5	14.5	25.4				425705					
19.05	15.75	25.4	425447	425458	425553	425457	1012538		425083		
18\1	16	25.4	425495					425470	1005037	1005425	
16.5	16.5	25.4	425085								
18	18	25.4	1003847			1003846		425081			



ISO1127 UNLIPPED



DN	Tube ID	Flange	EPDM/400	VMQ/600	FPM/300	PTFE 598	PTFE 598/FPM	PTFE 598/ EPDM	PTFE/530
8\1	10.3	34							
8	10.3	50.5	1001870	1001871					
10\1	14	34		1001842	1001847				
10	14	50.5	1001872	1001873					
15\1	17.9	34		1001850					
15	18.1	34			1001851				
15	18.1	50.5	1000006	1001882	1001883				
20	237	50.5	1000089	1001272	1001887				
25	29.7	50.5	425690	1001890	1000337				
32	38.6	64	425084	1002016	1002017				
40	44.3	64	425943	1002018	1000580			1029508	
50	56.3	77.5	1002024	425723	1002026		1008326		
65	72.1	91	1002063	1002064	1002065				
80	84.3	106	1002068	1002069	1002070				
100	109.7	130		1012133			1031431		
150	163.1	182.7							
200	213.9	233.5							
250	266.3	287.5	1003706						
300	315.9	338.3							

CLAMP GASKET LIPPED



DN	d BORE	FLANGE	EPDM/400	VMQ/300	VMQ/600	FPM/300	NBR/001	PTFE 598	PTFE 598/ FPM	PTFE 598/ EPDM	PTFE/530
3	3	25.4	1011429								
4\1	4	25.4	425556		425571			1030579		1033171	
6	6	34	1018150		425618				1031040	1004748	
8\1	6	25.4	425557		425674			425472			
6.5\1	6.3	25.4	425698								
10\3	7.7	21.84						425471			
8\2	8	25.4						1010961	1005033	1004749	
8\4	8	25.4	425555		425554						
8	8	34	425783		425676			1030540	1014223		
12.7\1	9.4	25.4	425558		425559	1001093	1012543	425661			
12\2	9.7	25.4						425469			
10\2	10	25.4	425672		1027652	425671		1004343	425613	1004750	
10	10	34						425700			
10	10	34	425466	425663	425643	425498			425927		
10	10	50.5	425961								
10.3	10.3	25.4						425567	1016884		
8	10.3	34							425737		
8	10.5	34				1000264					
8	10.5	50.5	425593		425580						
12.7	10.55	25.4	425449	425456	425755	425452		425661			
11	11	25.4						425082			
11.3	11.3	25.4	425706		1030401	425704					
12\1	12	25.4	425668		1002705	425699		425623		1004751	
10\1	12.3	25.4	425496								
	12.6							1009122			
	12.8	50.5	1008891								
13	13	25.4	425464								
10	13.5	50.5						425609			
14\2	14	25.4	425666			425667		425568	425572		
	14	50.5						1009123			
14\3	14	25.4	425551		425552						
10\1	14	34	425687		425922	1000265		1001768			
10	14	50.5	425594		425581						
14.5	14.5	25.4				425705					
19.05	15.75	25.4	425447	425458	425553	425457	1012538		425083		
18\1	16	25.4	425495					425470	1005037	1005425	
15	16	34	425467	425662	425644	425444		425626	425926	1005505	
15	16	50.5	425777		1006337			1009124			
16.5	16.5	25.4	425085								
	17.3	50.5						1009125			
	17.5	50.5	1008892								
18	18	25.4	1003847			1003846		425081			
15\1	17.9	34	425945		425596			1010208			
15	17.9	50.5						425607			
15	18.1	34	1002415			1000266					
15	18.1	50.5	425576		425582	425679			1004688		
21.3	19.5	34	1003985								
20	20	34	425465	425474	425645	425445	425468	425625	1010210	1005347	
20	20	50.5	425778		1000084	1005010					
	21.7	50.5						1009126			
	21.9	50.5	1008893								
1"	22.1	50.5	425744		425747	425750	1012556		1004689		
25	22.6	50.5	425401	425390	425540	425396	425400	425522	425530	1001790	
	22.9	50.5	1008894								
20	22.9	50.5	425595		425583	425680	1012276	425610	1004690		
25	26	50.5	425475	425477	425646	425476	425947	425453	425714	1025475	
	27.1	50.5	1008895					1009228			



CLAMP GASKET UNLIPPED



DN	d BORE	FLANGE	EPDM/400	VMQ/600	FPM/300	PTFE 598	PTFE 598/FPM	PTFE 598/ EPDM	PTFE/530
3	3	25.4							
4\1	4	25.4							
6	6	34							
8\1	6	25.4							
6.5\1	6.3	25.4							
10\3	7.7	21.84							
8\2	8	25.4							
8\4	8	25.4							
8	8	34	1013898						
12.7\1	9.4	25.4							
12\2	9.7	25.4							
10\2	10	25.4							
10	10	34							
10	10	34	1001843	425784	1001844				
10	10	50.5							
10.3	10.3	25.4							
8	10.3	34							
8	10.5	34							
8	10.5	50.5	1001870	1001871					
12.7	10.55	25.4							
11	11	25.4							
11.3	11.3	25.4							
12\1	12	25.4							
10\1	12.3	25.4							
	12.6								
	12.8	50.5							
13	13	25.4							
10	13.5	50.5							
14\2	14	25.4							
	14	50.5							
14\3	14	25.4							
10\1	14	34		1001842	1001847				
10	14	50.5	1001872	1001873					
14.5	14.5	25.4							
19.05	15.75	25.4							
18\1	16	25.4							
15	16	34	1001846	1001576	1001848				
15	16	50.5	1022977						
16.5	16.5	25.4							
	17.3	50.5							
	17.5	50.5							
18	18	25.4							
15\1	17.9	34		1001850					
15	17.9	50.5							
15	18.1	34			1001851				
15	18.1	50.5	1000006	1001882	1001883	1009516			
21.3	19.5	34	1010727						
20	20	34	1001853	1001361	1001854	1025746	1004693	1029748	
20	20	50.5							
	21.7	50.5							
	21.9	50.5							
1"	22.1	50.5	1010378				1024166		
25	22.6	50.5	425776	1001884	1001885	1002760	1031034		
	22.9	50.5							
20	22.9	50.5	1000089	1001272	1001887	1009645			
25	26	50.5	1001888	425785	1001889	1025749			
	27.1	50.5							



CLAMP GASKET LIPPED



DN	d BORE	FLANGE	EPDM/400	VMQ/300	VMQ/600	FPM/300	NBR/001	PTFE 598	PTFE 598/ FPM	PTFE 598/ EPDM	PTFE/530
25	29.7	50.5	425597		425584	425681		425611	1004691		
	30.5	50.5						1009229			
	30.7	50.5	1008896								
32	32	50.5	425478		425619	425479	425948	425624	425703	1008899	
11/2"	34.8	50.5	425745		425748	425751	1012557	425957	1004692		
38	35.6	50.5			1001425			425521			
38	35.6	50.5	425403	425391	425541	425397	425402		425531	1003551	
40	38	50.5	425480	425481	425648	425482	1005867	425454	425921	1001270	
32	38.4	50.5				1000267					
32	38.4	64	425598		425585	425682		425621	1004695		
	40.5	64	1008897					1009231			
	41.9	64	1008898					1009232			
40	44.3	64	425577		425579	425683		425612	1001706		
2"	47.5	64	425746		425749	425752	1012558				
51	48.6	64	425405	425392	425542	425398	125404	425520	425532	1003936	
50	50	64	425483	425484	425649	425493	425949	425455	1004694		
	53.1	77.5						1009233			
50	56.3	77.5	425599		425586	425684		425606	425719	1002238	
	57.1	77.5						1009234			
	57.1	77.5	1008951								
63.5	60.3	77.5	425407	425393	425543	425434	425406	425523	425533	1005184	
65	66	91	425485	425499	425650	425486	425950	425934	425920		
	69.1	91	1008952					1009235			
65	72.1	91	425628		425587	425685		425701	1004696	1010195	
76.1	73.1	91	425409	425394	425544	425433	425408	425524	425534	1005186	
80	81	106	425487	425664	425651	425711	1012559	425955	1000013		
80	84.3	106	425635		425588	425686		425702	1004686		
	84.9	106						1009238			
88.9	85.1	106	425451			1000268		425622	1002799		
101.6	97.6	119	425411	425395	425545	425446	425410	425525	425535	1005191	
100	100	119	425489	425504	425652	425488	425770	425956	1004687		
	106.3	130						1009239			
	108.3	130						1009240		1001463	
100	109.7	130	425630		425589	1000269		1004328	1000296		
	110.3	130						1009242			
114.3	109.1	130	425638		425653	425733	425729	1009241		1001463	
127	120	144.5	425639		425654		1012899	1002800	1002801		
125	125	155	425636		425952		425951	425929			
125	125	144.5	1001472								
139.7	135.7	155	425735			425734	425736				
152.4	147	167	425640		425655			425928			
150	150	167	1001475		425772						
150	150	183	425637		425954	425490	425953	425933	425923		
	162	183	425721		101426						
150	163.1	182.7	425631		425590						
168.3	163.1	183	425399			425718	425726	425526			
203.2	198	217.5	425641		425656			1006103			
	200	217.5	1001476								
200	200	233.5	425627		1005852		425720	1011730	425688		
200	213.9	233.5	425632		425591						
219.1	213.9	233.5	425497		425591	425732	425427	425658	425492		
254	250	268	425642		425657						
250	266.3	287.5	425633		425629						
304.8	299.8	319		425678							
300	315.9	338.3	425634		425592			1027164			
		25.4	425614		425550		1004329	425473			
		34	425562		425560						
		50.5	425563		425561			425547			
		77.5	425565								
		91	425566								

Other sizes available upon request.



CLAMP GASKET UNLIPPED



DN	d BORE	FLANGE	EPDM/400	VMQ/600	FPM/300	PTFE 598	PTFE 598/FPM	PTFE 598/ EPDM	PTFE/530
25	29.7	50.5	425690	1001890	1000337	100767			
	30.5	50.5							
	30.7	50.5							
32	32	50.5	1001893	1001928	1001929	425689	1033060		
11/2"	34.8	50.5	1001991	1001992	1001993	1033590	1024167		
38	35.6	50.5				1011114			
38	35.6	50.5	1001449	1000713	1001995		1005460	1007190	
40	38	50.5	1001996	1001997	1001998		1007878		
32	38.4	50.5							
32	38.4	64	425084	1002016	1002017				
	40.5	64							
	41.9	64							
40	44.3	64	425943	1002018	1000580			1029508	
2"	47.5	64	1007695				1024168		
51	48.6	64	1002020	1001393	1002021			1007191	
50	50	64	1002022	1002023	1000579	1031976			
	53.1	77.5							
50	56.3	77.5	1002024	425723	1002026		1008326		
	57.1	77.5							
	57.1	77.5							
63.5	60.3	77.5	425460	1002039	1002040		1024169	1007192	
65	66	91	1002060	1002061	1002062				
	69.1	91							
65	72.1	91	1002063	1002064	1002065				
76.1	73.1	91	425538	1000714	1002066	1004119	1024170		
80	81	106	1002067	425570	425287				
80	84.3	106	1002068	1002069	1002070				
	84.9	106							
88.9	85.1	106							
101.6	97.6	119	425459	425782	425781		1024171	1007193	
100	100	119	1030377	1024494			1035221		
	106.3	130							
	108.3	130							
100	109.7	130		1012133		1010736	1031431		
	110.3	130							
114.3	109.1	130				425528			
127	120	144.5					1030186		
125	125	155							
125	125	144.5							
139.7	135.7	155	1000678						
152.4	147	167	425788	1033115		425786			
150	150	167							
150	150	183	1030378				1033591		
	162	183							
150	163.1	182.7							
168.3	163.1	183							
203.2	198	217.5					1019496		
	200	217.5							
200	200	233.5							
200	213.9	233.5							
219.1	213.9	233.5							
254	250	268	1012217						
250	266.3	287.5	1006706						
304.8	299.8	319							
300	315.9	338.3							
		25.4							
		34							
		50.5	1011221						
		77.5							
		91							



DIN11851 | Standard



DN	d	D	H	Nut Dia.	EPDM/400	FPM/300	VMQ/001	NBR/006	PTFE/598
10	12	20	4.5	38	1002324	1002828	1002830	1002829	1002325
15	18	26	4.5	44	1002327	1002836	1002838	1002837	1002328
20	23	33	4.5	54	1002421	1002839	1002841	1002840	1002406
25	30	40	5	63	1002422	1002842	1002844	1002843	1002309
32	36	46	5	70	1002423	1002845	1002847	1002846	1002310
40	42	52	5	78	1002424	1002848	1002329	1002849	1002311
50	54	64	5	92	1001640	1002330	1002459	1002462	1001694
65	71	81	5	112	1002307	1002850	1002853	1002851	1002312
75	78	88	5	N/A	1002428	1002854	1002856	1002855	1002313
80	85	95	5	127	1002308	1002857	1002859	1002858	1002314
100	104	114	6	148	1002425	1002860	1002862	1002861	1002315
125	130	142	7	178	1002533	1002621	1002331	1002863	1002332
150	155	167	7	210	1002426	1002622	1002865	1002864	1002333

DIN11851 | High



DN	d	D	H	Nut Dia.	EPDM/400-HIGH	FPM/300	VMQ/001	NBR/006
10	12	20	4.5	38				
15	18	26	4.5	44				
20	23	33	4.5	54				
25	30	40	8	63	1012707	1012768	1012723	1012715
32	36	46	8	70	1012708	1012773	1012728	1012716
40	42	52	8	78	1012709	1012794	1012730	1012717
50	54	64	8	92	1012710	1012795	1012731	1012718
65	71	81	8	112	1012711	1012796	1012732	1012719
75	78	88	8	N/A	1012714	1012799	1012735	1012722
80	85	95	8	127	1012712	1012797	1012733	1012720
100	104	114	8	148	1012713	1012798	1012734	1012721
125	130	142	7	178				
150	155	167	7	210				

DIN11851 | Collar



DN	d	D	H	Nut Dia.	EPDM/400-COLLAR	FPM/300	VMQ/001	NBR/006
10	10.5	20	5	38	1013262	1012908	1013316	1013226
15	16.5	26	5	44	1013263	1012960	1013317	1013229
20	20.5	33	5	54	1013264	1012962	1013379	1013240
25	26.5	40	6	63	1013265	1012964	1013380	1013241
32	32.5	46	6	70	1013266	1012965	1013382	1013242
40	38 1/2	52	6	78	1013267	1012966	1013384	1013243
50	50.5	64	6	92	1013268	1012967	1013385	1013244
65	66.5	81	6	112	1013269	1012968	1013388	1013246
80	81.5	95	6	127	1013270	1012969	1013389	1013247
100	100 1/2	114	6	148	1013279	1012970	1013390	1013248
125	125	142	7	178	1013282	1012971	1013391	1013250
150	150	167	7	210	1013283	1012972	1013392	1013251



DIN 11864

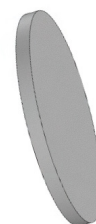


DN	Inch	Ød1	Ød2	EPDM/300	EPDM/304	FPM/310	NBR/305	FEP	VMQ/403	KZ6230
10	1/2	12	3.5	1010103	1008177	1007657			1006149	
10-iso		16	3.5							
15	3/4	18	3.5	1010105	1008179	1007358		1003516	1006150	
15-iso		20	3.5							
20		22	3.5	1010106	1008180	1007359		1003515		
	1	24	3.5	1010107	1008181	1009690				
20-iso		26	3.5							
25		28	3.5	1010108	1008182	212178		1003514	1006151	
25-iso		32	5					601143		
32		34	5	1010109	1008183	1007360		601144		
	1 1/2	37	5	1010110	1008184	1009691		601145		
40		40	5	1010111	1008185	1007361		1003517		
32-iso		40.5	5							
40-iso		46.5	5							
	2	50	5	1010112	1008186	1009689		600397		227265
50		52	5	1009050	1007362	1002434		1002398		
50-iso		58.5	5							
	2 1/2	62	5	1010113	1008187	1003697		1001078		
65		68	5	1010114	1008190	212402		1001482		
65-iso		73.5	5							
	3	75	5	1010115	1008189	1009692		600396		
80		83	5	1010116	1008190	1002436		1002399		
80-iso		86.5	5					1001481		
	4	100	5	1010117	1008191					
100		102	5	1010118	1008192	1002437		1002400		
100-iso		111	5							
125		127	5	1011579						
150		152	5	1011312				601229		
200		202	5							

DIN 11851: BLINDNUT WASHER

DN	D	H	EPDM/016	FPM/020
10	28	3	1013033	1013045
15	34	3	1013034	1013046
20	44	3	1013035	1013048
25P	36	3	1013027	
25-1"	40	3	1013020	
25	52	3	1013036	1013049
32	58	3	1013037	1013050
38P	56	3	1013028	
38	60	3	1013022	
40	65	3	1013038	1013051
50	78	3	1013039	1013052
51P	66	3	1013029	
51	70	3	1013023	

DN	D	H	EPDM/016	FPM/020
63P	81	3	1013030	
63	85	3	1013024	
65	95	3	1013040	1013053
75	104	3		
76P	94	3	1013031	
76	98	3	1013025	
80	110	3	1013041	1013054
100	130	3	1013042	1013055
104P	120	3	1013032	
104	125	3	1013026	
125	160	3	1013043	1013056
150	190	3	1013044	1013057
200	240	3		



SMS1149



DN	d	D	H	Nut Dia.	EPDM/400	FPM/300	NBR/001	NBR/006	PTFE/598
25	25	32	5.5	51	425310	425327	425300	1006054	425316
32	32	40	5.5		425307		425301		425317
38	38	48	5.5	74	425311	425328	425302	1006055	425318
51	51	61	5.5	84	425312	425323	425303	1006056	425319
63.5	63.5	73.5	5.5	100	425313	425324	425304	1006057	425329
76	76	86	5.5	114	425314	425325	425305	1006058	425330
101.6	101.6	113.5	5.5	154	425315	425326	425306	1006059	425020

DS



DN	d	D	H	Nut Dia.	EPDM/400	FPM/300	NBR/001	PTFE/599
25	25	31.8	4.5	57	425203	425218	425210	425228
38	38	46.8	4.5	71	425204	425219	425211	425226
51	51	58.7	4.5	86	425205	425220	425212	425217
63.5	63.5	74.2	4.5	103	425206	425221	425213	425227
76.1	76.1	87.6	4.5	115	425207	425222	425214	425216
101.6	101 3/5	112.1	4.5	147	425223	425225	425224	425229

ISO2853



DN	d	D	H	Nut Dia.	EPDM/400	FPM/300	NBR/001
25	23.6	32.5	6	51	425508	425412	425500
38	36.6	46	6		425509	425413	425501
51	49.6	59.5	6	74	425510	425414	425502
63.5	61.3	73.2	6	84	425511	425415	425503
76.1	73.9	86.5	6	100	425512	425416	425505
101.6	98.6	112.5	6	114	425513	425417	425507

M-Quick™ - Vulcanized O-Rings



Hot vulcanized joints with tolerances in accordance with ISO3601-1
 Food and pharmaceutical approved materials
 3-day service / 1-day express service

Available materials: **FPM/FDA - EPDM/FDA/USP CI.VI/3A - NBR/FDA - VMQ/FDA**

Minimum inner diameter of the o-ring (d_1): Cross section (d_2) $< 8 = \varnothing 100\text{mm}$ / $d_2 < 12 = d_1 \varnothing 150\text{mm}$ / $d_2 < \varnothing 20 = d_1 \varnothing 200\text{mm}$

All above materials comply with FDA cfr21: 177.2600 / EU1935/2004 / EU2023/2006

Available cross-sections:

	2,62	3	3,53	4	4,5	5	5,33	5,7	6	6,35	6,5	7	7,5	8	8,4	9	10	11	12	13	14	15	18	20	
EPDM70	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
FPM70	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
NBR70	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
VMQ70						*	*	*	*	*		*		*	*	*	*	*	*						

For sizes or materials not shown, please contact sales@m-seals.com.



FEP Encapsulated O-Rings

Encapsulated o-rings combine the resilience and sealing force of elastomer and the chemical resistance of FEP (PTFE). They consist of FEP outer cover and elastomeric core which gives a constant pressure of the encapsulation. This is an alternative to solid PTFE o-rings, which prevents cold flow and creep issues. Available with PFA encapsulation.

HARDNESS

Solid VMQ Core: 85-90 Shore A
 Solid FPM Core: 90-95 Shore A

TEMPERATURE RANGE

FEP/VMQ encapsulation: -60°C to 205°C
 PFA/VMQ encapsulation: -60°C to 260°C

FEP/FPM encapsulation: -20°C to 205°C
 PFA/FPM encapsulation: -20°C to 205°C

FEATURES

- Unique chemical resistance
- Broad temperature range
- Low friction

MEETS FOOD & PHARMACEUTICAL REQUIREMENTS

FEP-jacket in accordance with FDA cfr21: 177.1550, USP Class VI <88> 121°C, EU10/2011, EU1935/2004 and 3A20-22.

FPM-core (Viton™) and VMQ-core (Silicone) in accordance with FDA cfr21:177.2600.

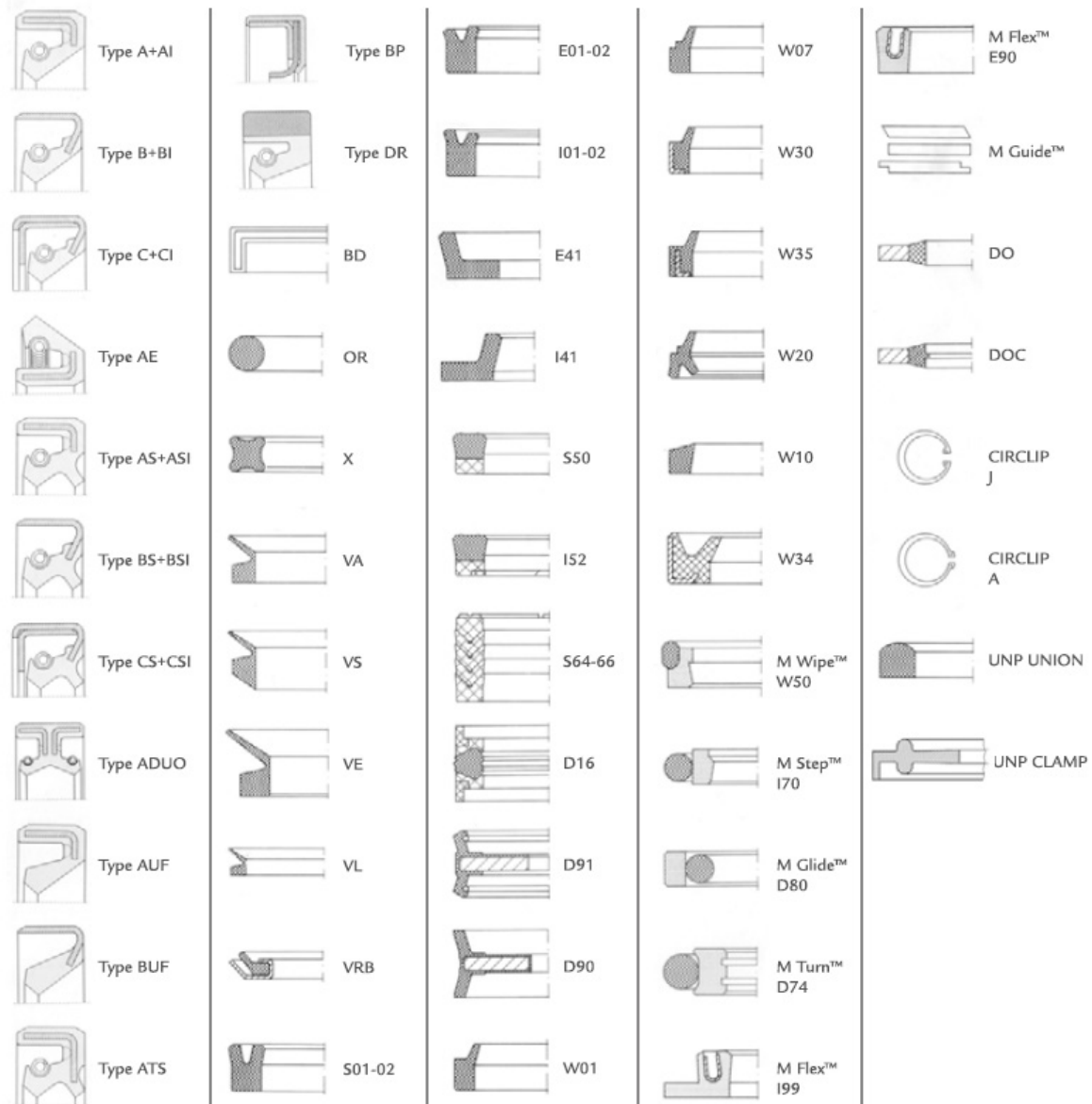


CROSS SECTION TOLERANCES		
Cross Section	Minimum ID	C/S Tolerance
1.5-2.5	16	-0.08 / +0.12
2.62	18	-0.08 / +0.12
3.00	22	-0.08 / +0.12
3.53	24	-0.08 / +0.15
4.00	32	-0.10 / +0.18
4.50	37	-0.10 / +0.18
5-5.33	37	-0.13 / +0.20
5.50	48	-0.13 / +0.20
5.70	52	-0.13 / +0.20
6.00	53	-0.13 / +0.20
6.50	55	-0.15 / +0.23
7.00	60	-0.15 / +0.23
7.50	75	-0.16 / +0.24
8.00	85	-0.16 / +0.24
8.40	105	-0.16 / +0.24
9.00	110	-0.16 / +0.24
10.00	125	-0.17 / +0.26
11.00	135	-0.17 / +0.26
12.00	145	-0.17 / +0.26
12.70	170	-0.17 / +0.26
14.00	250	-0.19 / +0.29
15.00	280	-0.19 / +0.29
18.00	340	-0.2 / +0.32
20.00	370	-0.2 / +0.32

FEP THICKNESS	
	mm
	0.20
	0.25
	0.25
	0.30
	0.30
	0.30
	0.40
	0.40
	0.50
	0.50
	0.50
	0.50
	0.50
	0.50
	0.50
	0.50
	0.75
	0.75
	0.75
	0.75
	0.75
	0.75
	0.75

INTERNAL DIAMETER TOLERANCE	
Up to ID (mm)	Tolerance
12.7	+/- 0.20
25.4	+/- 0.25
38.1	+/- 0.30
50.8	+/- 0.45
63.5	+/- 0.55
88.9	+/- 0.61
101.6	+/- 0.71
127	+/- 0.76
152.4	+/- 0.94
177.8	+/- 1.02
203.2	+/- 1.14
254	+/- 1.40
330.2	+/- 1.52
406.4	+/- 1.78
800	+/- 2.00
1000	+/- 2.00
1500	+/- 2.75
2000	+/- 3.90
2500	+/- 9.00
3000	+/- 11.25
3500	+/- 13.5
4000	+/- 15.75
5000	+/- 20.25
6000	+/- 24.75





Small things make GREAT things possible