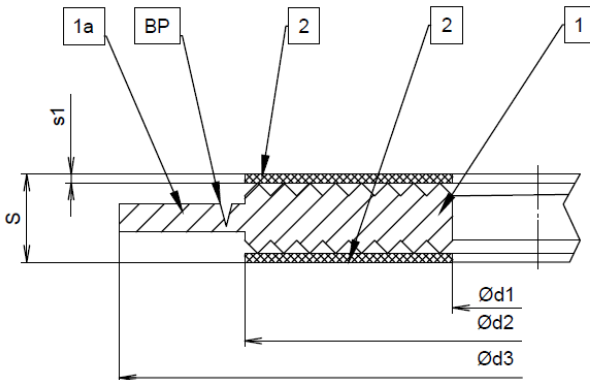


This document is a supplement to our catalog of Industrial gaskets, version *DIMER GROUP V 2014-01*.  
Camprofile gaskets **DIMERFLEX PT**.

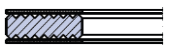
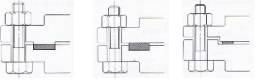
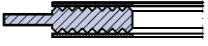

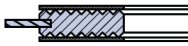
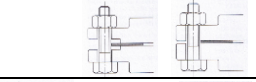

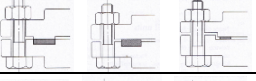

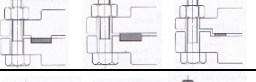

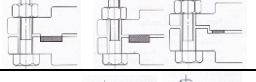

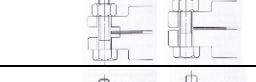
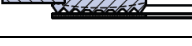
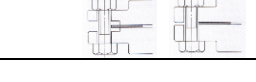
### DESCRIPTION OF DIMERFLEX PT4B



#### **Legend**

- 1-parallel metal core with concentric grooves
- 1a-outer / integral centring ring
- 2-soft layers of sealing material
- BP-„break point“ (on requested)
- s-total th. of camprofile
- s1-th. of sealing material
- Ød1-inner diameter
- Ød2-outer diameter of sealing element
- Ød3-outer diameter of centring ring

### TYPE OF CAMROFILE

trade name	description	sketch	type of flanges
<b>DIMERFLEX PT4A</b>	parallell root core without centring ring		
<b>DIMERFLEX PT4B</b>	parallell root core with centring ring		
<b>DIMERFLEX PT4C</b>	parallell root core with floating centring ring		
<b>DIMERFLEX PT4E</b>	smooth root core without sealing layers		
<b>DIMERFLEX PT4E-G</b>	smooth parallell core with sealing layers		
<b>DIMERFLEX PT4Y</b>	convex root core without centring ring		
<b>DIMERFLEX PT4X</b>	convex root core with integral centring ring		
<b>DIMERFLEX PT4Z</b>	convex root core with floating centring ring		

## STANDARD CORE MATERIALS

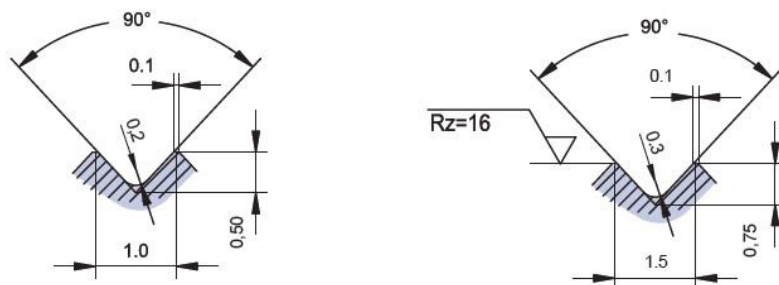
material	AISI / ASTM	EN 10027-1 specification	EN 10027-2 specification	BS	ČSN specification	temperature (°C)		hardness (HB)
						min	max	
carbon steel	238-C	RSt. 37.2 CS	1.0038	D/40B	11 375	-40	+500	100 - 120
low carbon steel	-	M2 / ARMCO	1.1003	S/LCS	-	-60	+500	90 - 110
stainless steel	304	X5CrNi 18 10	1.4301	304S 15/16/31	17 240	-250	+550	130 - 180
stainless steel	304L	X2CrNi 19 11	1.4306	304 S11	17 249	-270	+550	130 - 170
stainless steel	309	X15CrNiSi 20 12	1.4828	309 S24	17 251	-110	+1000	130 - 220
stainless steel	316	X5CrNiMo 17 12 2	1.4401	316 S31/33	17 346	-200	+550	130 - 190
stainless steel	316L	X2CrNiMo 18 14 3	1.4404	316 S11/13	17 349	-200	+550	120 - 170
stainless steel	316Ti	X6CrNiMoTi 17 12 2	1.4571	320 S31	17 348	-270	+550	130 - 190
stainless steel	321	X6CrNiTi 18 10	1.4541	321 S12/49/87	17 247	-270	+550	130 - 190

## STANDARD LAYERS

material	temperature (°C)		pH	application	colour coding
	min.	max.			
GRAPHITE*	-200	+550	0-14	agressive medium	grey
PTFE	-200	+260	0-14	agressive medium	white
CERAMIC PAPER	-200	+1100	-	very high temperature	light green
MICA	-200	+1000	-	high temperature	pink

\* on request we are able to produce a nuclear quality

## DIMENSIONS AND SIZE – PROFIL TYPE A / PROFIL TYPE B



Another profile after consultaion.

## FLANGE SURFACE ROUGHNESS

roughness	value (µm)				roughness
Ra	-	3,2	6,3	-	yes
Ra	1,6	-	-	12,5	acceptable*

\* under specific conditions

In case of doubts contact our technical support.

## SEATING STRESS RANGE

The camprofile gasket offers reliable sealing performance when seated within the following stress ranges.

material	Seating stress <b>DIMERFLEX řady PT</b> (MPa +20°C)		
	min.	opt.	max.
<b>GRAPHITE</b>	20	90	400
<b>PTFE</b>	20	90	350
<b>CERAMIC PAPER</b>	50	120	250
<b>MICA</b>	60	100	260
<b>CSF (Dimersil)</b>	40	130	240

## CORE THICKNESS

core thickness	
standard	3 mm
new application	4 mm
nonstandard	2 mm / 5 mm

## SEALING LAYER THICKNESS

Layer thickness	
standard	0,5 / 1,0 mm
nonstandard	0,75 - 1,5 mm

## VÝHODY TĚSNĚNÍ DIMERFLEX PT

- excellent solution for extreme operating conditions
- multiple re-application camprofile (
- několikanásobná možná opětovná aplikace kamprofilu (after inspection the metal core profile and applying new sealing layres) – **beneficial economic solutions**)
- application with lower sealing stress
- proven to be very effective where temperatures and pressure are fluctuating
- resist pressures up to 250 bar (400 bar) and dependent on layers resist temperatures up to +1100 °C
- do not damage the flange surface and can be easily removed
- convex type is highly suitable for weak flange construction and
- centring rings ensure optimum gasket positioning on the flanges and between the bolts
- **DIMERFLEX** can be used in the method VCS system (crisis method of sealing RTJ for flanges acc. to ASME B16.20 spec. 6A a ISO 7483)

## DIMENSION RANGE

Camprofiles are suitable for applications acc. to various specifications for flanges

ČSN EN 1092-1, ČSN EN 12560-6 (ČSN EN 1514-6), ANSI B16.5 a BS 1560, ASME B16.47 serie A / B, MSS SP-44, DIN, male / female, tongue / groove etc.

Non standard camprofiles we can produce acc. to drawing / or sketch, including bars.

### **Standard dimensions series DIMERFLEX PT in our catalog.**

In case of doubts contact our technical support.

## BOLT NUMBERS AND SIZE FOR ASME FLANGES

pressure class nominal diameter	150 lb	300 lb	400 lb	600 lb	900 lb	1500 lb	2500 lb
1/2"	4 x 1/2"	4x1/2"	4x5/8"	4x1/2"	4x3/4"	4x3/4"	4x3/4"
3/4"	4x1/2"	4x5/8"	4x5/8"	4x5/8"	4x3/4"	4x3/4"	4x3/4"
1"	4x1/2"	4x5/8"	4x5/8"	4x5/8"	4x7/8"	4x7/8"	4x7/8"
1 1/4"	4x1/2"	4x5/8"	4x5/8"	4x5/8"	4x7/8"	4x7/8"	4x1"
1 1/2"	4x1/2"	4x3/4"	4x3/8"	4x3/4"	4x1"	4x1"	4x1 1/8"
2"	4x5/8"	5x5/8"	8x5/8"	5x5/8"	8x7/8"	8x7/8"	8x1"
2 1/2"	4x5/8"	8x3/4"	8x3/4"	8x3/4"	8x1"	8x1"	8x1 1/8"
3"	4x5/8"	8x3/4"	8x3/4"	8x3/4"	8x7/8"	8x1 1/8"	8x1 1/4"
3 1/2"	8x5/8"	8x3/4"	8x7/8"	8x7/8"			
4"	8x5/8"	8x3/4"	8x7/8"	8x7/8"	8x1 1/8"	8x1 1/4"	8x1 1/2"
5"	8x3/4"	8x3/4"	8x7/8"	8x1"	8x1 1/4"	8x1 1/2"	8x1 3/4"
6"	8x3/4"	12x3/4"	12x7/8"	12x1"	12x1 1/8"	12x1 3/8"	8x2"
8"	8x3/4"	12x7/8"	12x1"	12x1 1/8"	12x1 3/8"	12x1 5/8"	12x2"
10"	12x7/8"	16x1"	16x1 1/8"	16x1 1/4"	16x1 3/8"	12x1 7/8"	12x2 1/2"
12"	12x7/8"	16x1 1/8"	16x1 1/4"	20x1 1/4"	20x1 3/8"	16x2"	12x2 3/4"
14"	12x1"	20x1 1/8"	20x1 1/4"	20x1 3/8"	20x1 1/2"	16x2 1/4"	
16"	16x1"	20x1 1/4"	20x1 3/8"	20x1 1/2"	20x1 5/8"	16x2 1/2"	
18"	16x1 1/8"	24x1 1/4"	24x1 3/8"	20x1 5/8"	20x1 7/8"	16x2 3/4"	
20"	20x1 1/8"	24x1 1/4"	24x1 1/2"	24x1 5/8"	20x2"	16x3"	
22"	20x1 1/4"	24x1 1/2"	24x1 5/8"	24x1 3/4"			
24"	20x1 1/4"	24x1 1/2"	24x1 3/4"	24x1 7/8"	20x2 1/2"	16x3 1/2"	
26"	24x1 1/4"	26x1 5/8"	28x1 3/4"	28x1 7/8"	20x2 3/4"		
28"	28x1 1/4"	28x1 5/8"	28x1 7/8"	28x2"	20x3"		
30"	28x1 1/4"	28x1 3/4"	28x2"	28x2"	20x3"		
32"	28x1 1/2"	28x1 7/8"	28x2"	28x2 1/4"	20x3 1/4"		
34"	32x1 1/2"	28x1 7/8"	28x2"	28x2 1/4"	20x3 1/2"		
36"	32x1 1/2"	32x2"	32x2"	28x2 1/2"	20x3 1/2"		
38"	32x1 1/2"	32x1 1/2"	32x1 3/4"	28x2 1/4"	20x3 1/2"		
40"	36x1 1/2"	32x1 5/8"	32x1 7/8"	32x2 1/4"	24x3 1/2"		
42"	36x1 1/2"	36x2"	32x2 1/2"	28x2 3/4"	24x3 1/2"		
44"	40x1 1/2"	32x1 3/4"	32x2"	32x2 1/2"	24x3 3/4"		
46"	40x1 1/2"	28x1 7/8"	36x2"	32x2 1/2"	24x4"		
48"	44x1 1/2"	32x1 7/8"	28x2 1/4"	32x2 3/4"	24x4"		
50"	44x1 3/4"	32x2"	32x2 1/4"	28x3"			
52"	44x1 3/4"	32x2"	32x2 1/4"	32x3"			
54"	44x1 3/4"	28x2 1/4"	28x2 1/2"	32x3"			
56"	48x1 3/4"	32x2 1/4"	32x2 1/2"	32x3 1/4"			
58"	48x1 3/4"	28x2 1/4"	32x2 1/2"	32x3 1/4"			
60"	52x1 3/4"	32x2 1/4"	32x2 3/4"	28x3 1/2"			

## BOLT NUMBERS AND SIZE FOR DIN FLANGES

DN/PN	1 - 2,5	6	10	16	25	40	64	100	160	250	320	400
6		4 M 10				4 M 10						
8		4 M 10				4 M 10						
10		4 M 10				4 M 12	4 M 12	4 M 12	4 M 12	4 M 16	4 M 16	4 M 16
15		4 M 10				4 M 12	4 M 12	4 M 12	4 M 12	4 M 16	4 M 16	4 M 20
20		4 M 10				4 M 12						
25		4 M 10				4 M 12	4 M 16	4 M 16	4 M 16	4 M 20	4 M 20	4 M 24
32		4 M 12				4 M 16						
40		4 M 12				4 M 16	4 M 20	4 M 20	4 M 20	4 M 24	4 M 24	4 M 27
50		4 M 12				4 M 16	4 M 20	4 M 24	4 M 24	8 M 24	8 M 24	8 M 27
65		4 M 12		4 M 16		8 M 16	8 M 20	8 M 24	8 M 24	8 M 24	8 M 27	8 M 30
80		4 M 16		8 M 16		8 M 16	8 M 20	8 M 24	8 M 24	8 M 27	8 M 27	8 M 30
100		4 M 16		8 M 16		8 M 20	8 M 24	8 M 27	8 M 27	8 M 30	8 M 33	8 M 36
125		8 M 16		8 M 16		8 M 24	8 M 27	8 M 30	8 M 30	12 M 30	12 M 33	12 M 36
150		8 M 16		8 M 20		8 M 24	8 M 30	12 M 30	12 M 30	12 M 33	12 M 36	12 M 39
175				8 M 20	12 M 24	12 M 27	12 M 30	12 M 30	12 M 33	12 M 36	12 M 39	12 M 45
200		8 M 16	8 M 20	12 M 20	12 M 24	12 M 27	12 M 33	12 M 33	12 M 33	12 M 39	16 M 39	16 M 45
250		12 M 16	12 M 20	12 M 24	12 M 27	12 M 30	12 M 33	12 M 36	12 M 39	16 M 45	16 M 48	
300		12 M 16	12 M 20	12 M 24	16 M 27	16 M 30	16 M 39	16 M 39	16 M 39	16 M 48		
350		12 M 20	16 M 20	16 M 24	16 M 30	16 M 33	16 M 36	16 M 45				
400		16 M 20	16 M 24	16 M 27	16 M 33	16 M 36	16 M 39	16 M 45				
450		16 M 20	20 M 24	20 M 27		20 M 36						
500		20 M 20	20 M 24	20 M 30	20 M 33	20 M 39	20 M 45	20 M 52				
600		20 M 24	20 M 27	20 M 33	20 M 36	20 M 45	20 M 52	20 M 56				
700		24 M 24	24 M 27	24 M 33	24 M 39	24 M 45	24 M 52	24 M 64				
800		24 M 27	24 M 30	24 M 36	24 M 45	24 M 52	24 M 56					
900		24 M 27	28 M 30	28 M 36	28 M 45	28 M 52	28 M 56					
1000		28 M 27	28 M 33	28 M 39	28 M 52	28 M 52	29 M 64					
1200	32 M 27	32 M 30	32 M 36	32 M 45	32 M 52	32 M 56	32 M 72					
1400	36 M 27	36 M 33	36 M 39	36 M 45	36 M 56	36 M 56						
1600	40 M 27	40 M 33	40 M 45	40 M 52	40 M 56	40 M 64						
1800	44 M 27	44 M 36	44 M 45	44 M 52	44 M 64							
2000	48 M 27	48 M 39	48 M 45	48 M 56	48 M 64							
2200	52 M 30	52 M 39	52 M 52									
2400	56 M 30	56 M 39	56 M 52									
2600	60 M 30	60 M 45	60 M 52									
2800	64 M 33	64 M 45	64 M 52									
3000	68 M 33	68 M 45	68 M 56									

## INSTALLATION PROCEDURE

Please pay attention to the installation procedure.

- clean contact surfaces of the flanges and check them if they are not damaged
- with low parallelism (opening) of the flange apply camprofile convex type
- put camprofile gasket right in the centre
- tight the bolts approximately 50% of the final torque acc. to following sequence in the figure (repeat then 75%, 100%). If the correct tighten sequence is not followed gasket will be damaged and not reach required sealing performance
- we do not recommend bolts un-tightening and re-tightening
- for normal tightening procedure keep to the assembly instructions for semimetallic gaskets (can be found at [www.dimer.cz](http://www.dimer.cz)).
- in case of doubts contact our technical support

