

Spacers



Spacers Form F (Class 150)

Flexible up to the last millimetre! For lengths up to 20 mm we recommend spacers Form F made of solid PTFE.



Spacers Form F (Class 150)

Material:

- PTFE (virgin or conductive)
- PP (up to nominal pipe size NPS 12")

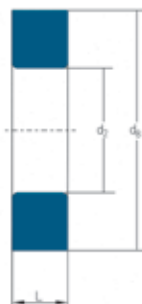
Other pressure rates:

- Class 300

Special features:

- with reinforcement ring
- filled PTFE




























Form F






Spacers Form F are also available as **inclined spacers** with various degrees.

NPS	L (mm)			d ₁ (mm)	d ₂ (mm)	d ₈ (mm)	Weight (ca. kg/m)
	min.		max.				
1/2"	10	---	15	21,3	12	44	0,10
3/4"	10	15	20	26,7	15	54	0,10
1"	10	15	20	33,4	20	63	0,20
1 1/4"	10	15	20	42,2	29	73	0,25
1 1/2"	10	15	20	48,3	35	83	0,30
2"	10	15	20	60,3	45	101	0,40
2 1/2"	10	15	20	73,0	57	122	0,50
3"	10	15	20	88,9	70	133	0,60
4"	10	15	20	114,3	93	170	0,75
5"	10	15	20	141,3	119	194	1,10
6"	10	15	20	168,3	144	219	1,40
8"	10	15	20	219,1	191	273	2,00
10"	10	15	20	273,0	239	324	3,20
12"	10	15	20	323,8	290	405	4,00
14"	10	15	25	355,6	326	445	4,50
16"	10	15	25	406,4	372	510	5,20
18"	10	15	25	457,2	428	545	6,10
20"	10	15	25	508,0	480	600	7,20

L = Total length
d₁ = Outer diameter of the pipe
d₂ = Inner diameter
d₈ = Outer diameter

NPS	Possible vacuum		
	23°C	100°C	230°C
1"			
1 1/2"			
2"			
3"			
4"			
6"			
8"			
10"			
12"			

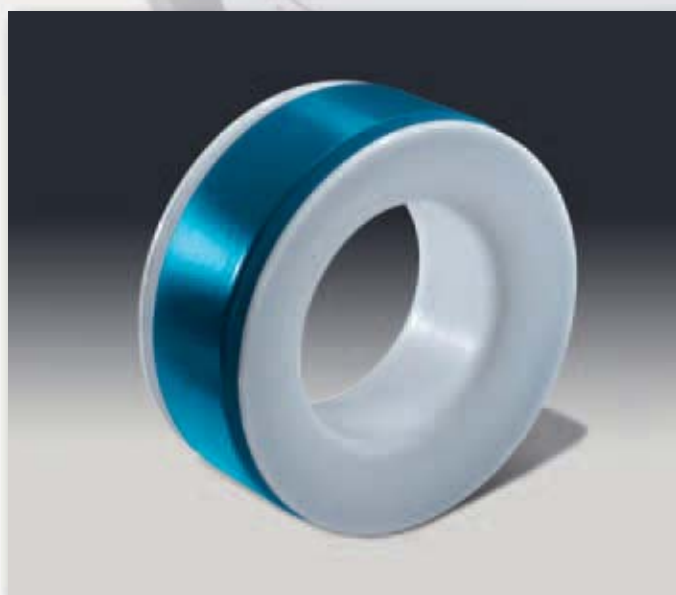
Vacuum resistance:

-  = full vacuum
-  = limited vacuum
-  = no vacuum

Please refer to the next nominal pipe size if your nominal pipe size is not listed.

Spacers Form G (Class 150)

For lengths from 20 – 60 mm we reinforce the spacers Form G with a resilient metal core.



Spacers Form G (Class 150)

Lining material:

- PTFE (virgin or conductive)
- PP (up to nominal pipe size NPS 12")

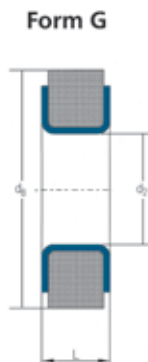
Other pressure rates:

- Class 300

Material: carbon steel and stainless steel

Special features:

- earthing studs
- final painting






Spacers Form G are also available as **inclined spacers** with various degrees.

NPS	L (mm)		d ₁ (mm)	d ₂ (mm)	d ₈ (mm)	Weight (ca. kg/m)
	min.	max.				
1/2"	15	60	21,3	12	44	0,9
3/4"	15	60	26,7	15	54	1,2
1"	15	60	33,4	20	63	1,8
1 1/4"	15	60	42,2	29	73	2,1
1 1/2"	15	60	48,3	35	83	2,6
2"	15	60	60,3	45	101	3,7
2 1/2"	15	60	73,0	57	122	4,7
3"	15	70	88,9	70	133	5,3
4"	15	70	114,3	93	170	9,5
5"	15	70	141,3	119	194	11,0
6"	20	80	168,3	144	219	14,0
8"	20	80	219,1	191	275	18,0
10"	20	90	273,0	239	324	29,0
12"	20	90	323,8	290	405	30,0
14"	25	90	355,6	326	445	50,0
16"	25	90	406,4	372	510	60,0
18"	25	100	457,2	428	545	71,0
20"	25	100	508,0	480	600	75,0

L = Total length
d₁ = Outer diameter of the pipe
d₂ = Inner diameter
d₈ = Outer diameter

NPS	Standard	Lining thickness (mm)	Possible vacuum		
			23°C	100°C	230°C
1"	●	3	Full	Full	Full
		4	Full	Full	Full
1 1/2"	●	3	Full	Full	Full
		4	Full	Full	Full
2"	●	3	Full	Full	Full
		4	Full	Full	Full
3"	●	3	Full	Full	Full
		4	Full	Full	Full
4"	●	3	Full	Full	Full
		4,5	Full	Full	Full
6"	●	5	Full	Full	Full
		6	Full	Full	Full
8"	●	5	Full	Full	Full
		6	Full	Full	Full
10"	●	5	Full	Full	Full
		7,5	Full	Full	Full
12"	●	5	Full	Full	Full
		7,5	Full	Full	Full

Vacuum resistance:

-  = full vacuum
-  = limited vacuum
-  = no vacuum

Please refer to the next nominal pipe size if your nominal pipe size is not listed.

Spacers Form H (Class 150)

Spacers Form H with a length of more than 60 mm consist of a pressure-resistant, but lightweight metal core with interior lining.



Spacers Form H (Class 150)

Lining materials:

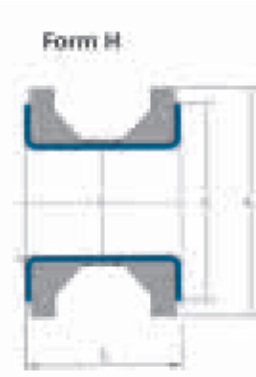
- PTFE (virgin or conductive)
- PP (up to nominal pipe size NPS 12")

Other pressure rates:

- Class 300

















































Material: carbon steel and stainless steel

Special features: earthing studs, earthing lugs, flange stopper, field flaring pipes, final painting.






NPS	L (mm)		d ₁ (mm)	s (mm) Standard	d ₄ (mm)	d ₈ (mm)	Weights	
	min.	max.					Pipe (ca. kg/m)	Pair of flanges (ca. kg)
1/2"	60	100	21,3	3	35,1	44	1,2	0,9
3/4"	60	100	26,7	3	42,9	54	1,6	1,2
1"	60	100	33,4	3	50,8	63	2,5	1,8
1 1/4"	60	100	42,2	3	63,5	73	3,6	2,1
1 1/2"	60	100	48,3	3	73,2	83	4,5	2,6
2"	60	100	60,3	3	91,9	101	5,8	3,7
2 1/2"	60	100	73,0	3	104,6	122	7,2	4,7
3"	70	125	88,9	3	127,0	133	10,0	5,3
4"	70	125	114,3	3	157,2	170	14,0	9,5
5"	70	150	141,3	4,5	185,7	194	18,5	11,0
6"	80	150	168,3	5	215,9	219	23,5	14,0
8"	80	200	219,1	5	269,7	273	39,0	18,0
10"	90	200	273,0	5	323,9	324	55,5	29,0
12"	90	200	323,8	5	381,0	405	74,0	30,0
14"	90	250	355,6	5	412,8	445	85,0	50,0
16"	90	250	406,4	5	469,9	510	102,0	60,0
18"	100	250	457,2	5	533,4	545	130,0	71,0
20"	100	250	508,0	5	584,2	600	155,0	113,0

L = Total length
d₁ = Outer diameter of the pipe
s = Lining thickness
d₄ = Flaring diameter
d₈ = Outer diameter

NPS	Standard	Lining thickness (mm)	Possible vacuum		
			23°C	100°C	230°C
1"	●	3			
		4			
1 1/2"	●	3			
		4			
2"	●	3			
		4			
3"	●	3			
		4			
4"	●	3			
		4,5			
6"	●	5			
		6			
8"	●	5			
		6			
10"	●	5			
		7,5			
12"	●	5			
		7,5			

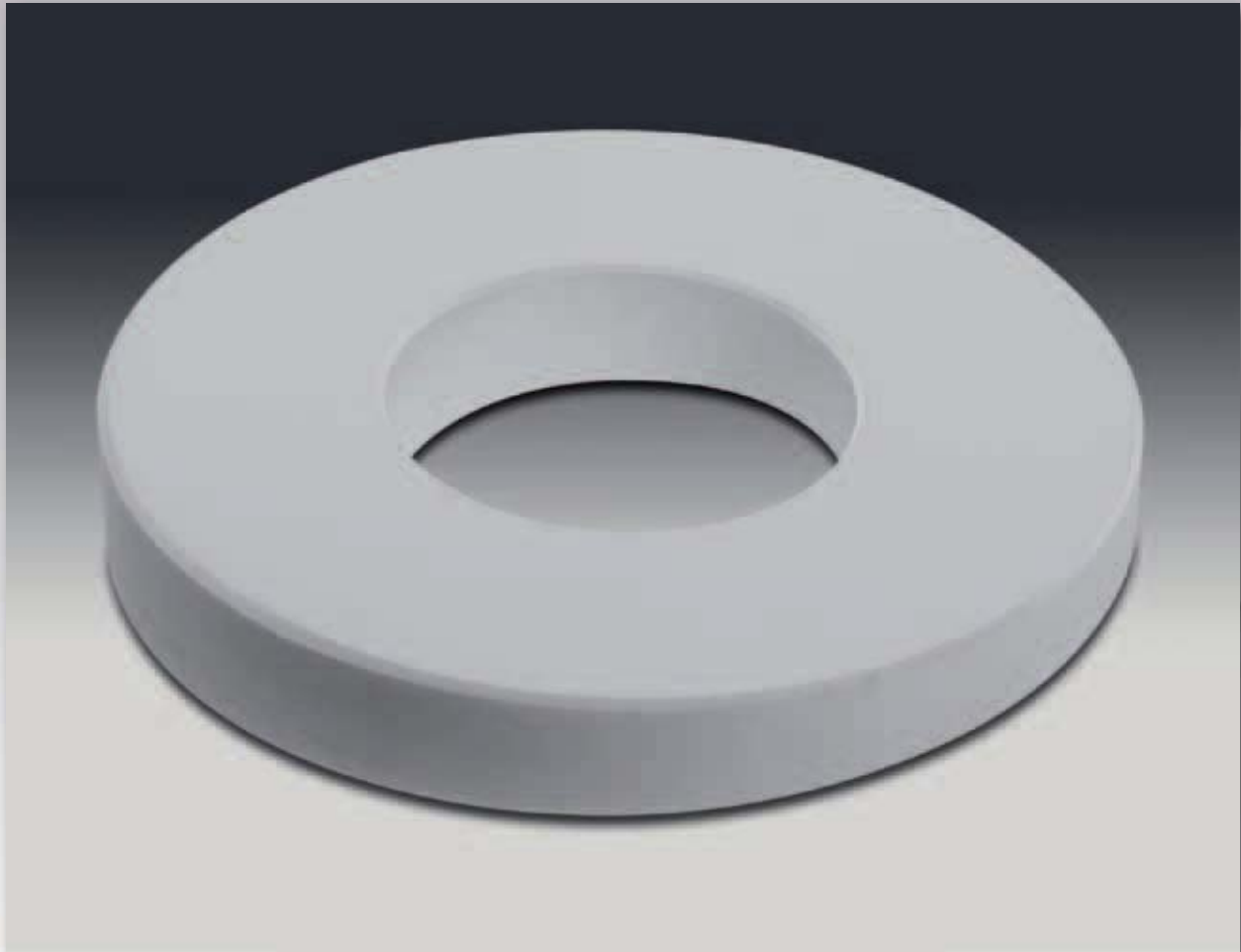
Vacuum resistance:

-  = full vacuum
-  = limited vacuum
-  = no vacuum

Please refer to the next nominal pipe size if your nominal pipe size is not listed.

Inclined spacer (Class 150)

Flexible in every situation! The angled spacers can be delivered in any angle, tapered on one side only or on both sides.



Inclined Spacer (Class 150)

Executions:

- Steel / PTFE (virgin or conductive)
- Solid PTFE (virgin or conductive)

Other pressure rates:

- Class 300































Standard angle for inclined spacer: 3°

Other angles upon request.




NPS	L (mm)	Weight (ca. kg/m)
1"	15	1,8
1¼"	15	2,1
1½"	15	2,6
2"	20	3,7
2½"	20	4,7
3"	20	6,3
4"	25	9,5

L = Total length



NPS	Standard	Lining thickness (mm)	Possible vacuum		
			23°C	100°C	230°C
1"	●	3			
		4			
1½"	●	3			
		4			
2"	●	3			
		4			
3"	●	3			
		4			
4"	●	3			
		4,5			

Vacuum resistance:

-  = full vacuum
-  = limited vacuum
-  = no vacuum

Please refer to the next nominal pipe size if your nominal pipe size is not listed.