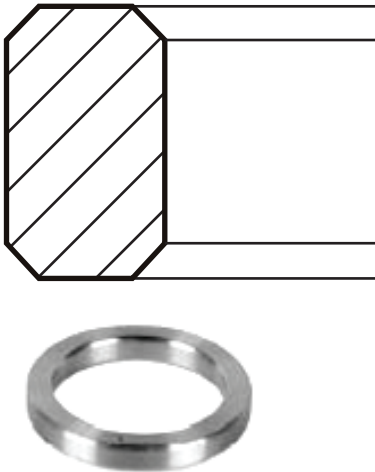


ring joint gasket - RJ RC

gasket spec



description

this is a standard ring joint with octagonal cross section.

the ring joints are produced from one piece of metal. this kind of gasket is suitable for very high pressure applications and the very high temperature. the ring joints have to be used for special shape of flanges, so that together with the correct choice of material and profile shape, realized a very reliable seal. originally developed for use in the offshore or petrochemical industry where high pressure and temperature applications necessitated the need for a high integrity seals.

principle of sealing

these gaskets seal by a line contact which provides an initial high seating stress at low bolt loads. the contact surfaces of the gasket and flange have to be carefully processed and free of any ridges and tool marks. the hardness of the gasket should be less then the hardness of the sealing surface of flange. the latest treatment have to be so as the surface of ring joint was at least by 5 HRC lower then sealing surface of flange.

level of sealing surfaces

0,8 - 1,6 $\mu\text{m Ra}$

materials

soft iron steel	hardness 90-110 HB, temperature range -60 up to 450°C
aluminium	hardness 20-45 HB, temperature range -250 up to 350°C
copper	hardness 35-70 HB, temperature range -270 up to 350°C
low carbon steel	hardness 90-120 HB, temperature range -10 up to 450°C
stainless steel	hardness 120-170 HB, temperature range -200 up to 550°C
temperature treatment is possible	

pressure using

up to 400 bars



ring joint numbers for individual nominal dimensions and presure classes
according to ASME B16.5

numbers of ring joints for BX according to API 6A, 6BX							
DN	pressure class						
	150	300	400	600	900	1500	2500
1/2"		11		11	12	12	13
3/4"		13		13	14	14	16
1"	15	16		16	16	16	18
1 1/4"	17	18		18	18	18	21
1 1/2"	19	20		20	20	20	23
2"	22	23		23	24	24	26
2 1/2"	25	26		26	27	27	28
3"	29	31		31	31	35	32
3 1/2"	33	34		34			
4"	36	37	37	37	37	39	38
5"	40	41	41	41	41	44	42
6"	43	45	45	45	45	46	47
8"	48	49	49	49	49	50	51
10"	52	53	53	53	53	54	55
12"	56	57	57	57	57	58	60
14"	59	61	61	61	62	63	
16"	64	65	65	65	66	67	
18"	68	69	69	69	70	71	
20"	72	73	73	73	74	75	
24"	76	77	77	77	78	79	

serie A

numbers of ring joints for RC, according to ASME 16.47 series A		
DN	pressure class	
	300 - 600	900
26"	93	100
28"	94	101
30"	95	102
32"	96	103
34"	97	104
36"	98	105



according to API 6A, 6B

numbers of ring joints for RC according to API 6A, 6B			
DN	pressure class		
	2000	3000	5000
2 1/16"	23	24	24
2 9/16"	26	27	27
3 1/16"	31	31	35
4 1/16"	37	37	39
5 1/8"	41	41	44
7 1/16"	45	45	46
9"	49	49	50
11"	53	53	54
13 5/8"	57	57	
16 3/4"	65	66	
20 3/4"		74	
21 1/4"	73		