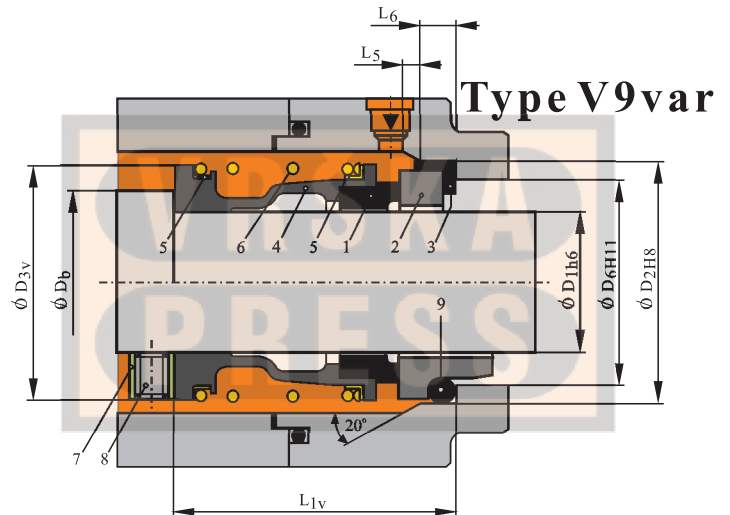
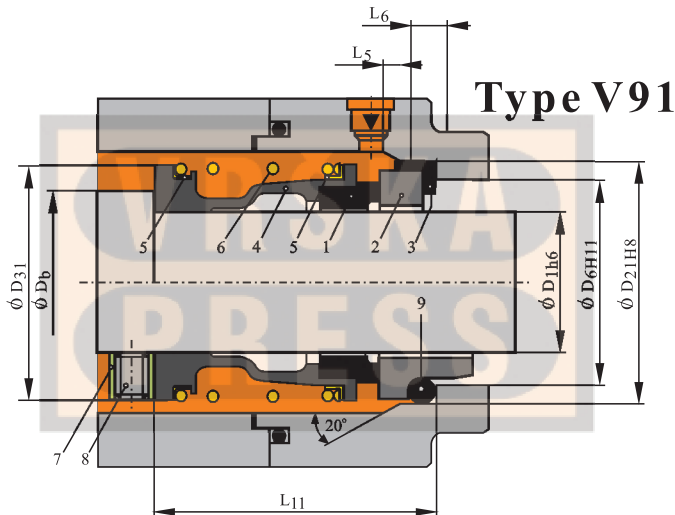
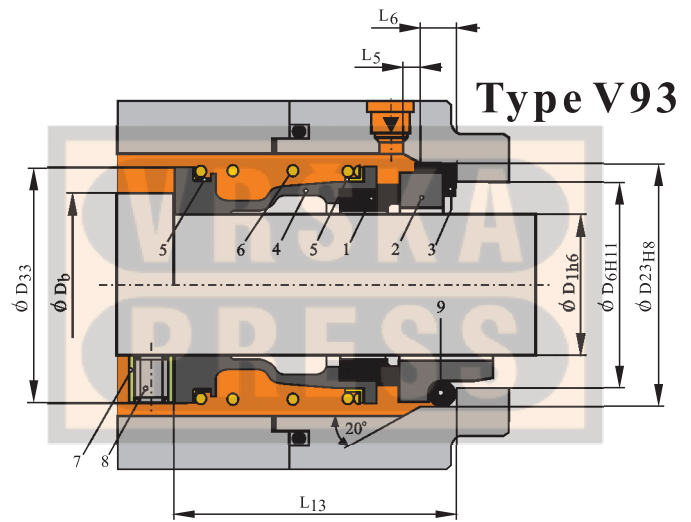
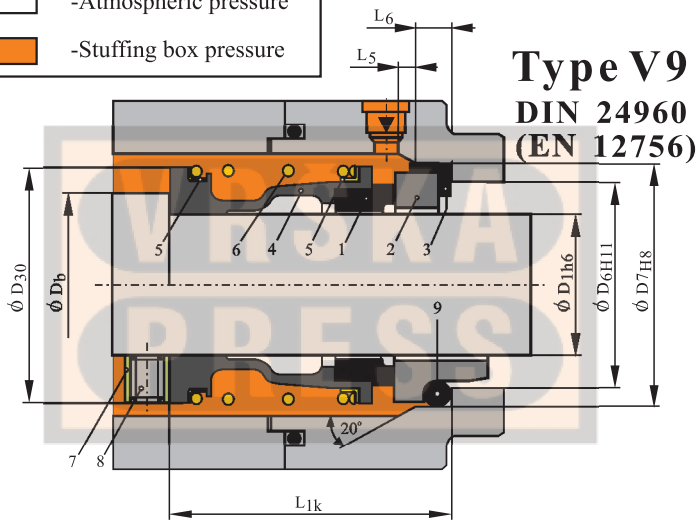
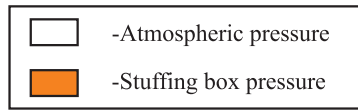


## Unbalanced mechanical seal Independent of the shaft rotating direction



### Working conditions

Mechanical seals from series V9 are designed for light working conditions, for the pressure up to 10 bar ( $p = 10$  bar) and temperatures from minus  $40^\circ\text{C}$  to  $204^\circ\text{C}$  ( $t = -40^\circ\text{C} \sim 204^\circ\text{C}$ ). Our Mechanical Seals proved themselves especially at following medium: cold and hot water up to  $130^\circ\text{C}$ , demineralized water, wastewater, beer, beer mash, malt, milk and dairy product, juice and natural juice, mild acid, mild alkal (base), heavy oil, ammonia ( $\text{NH}_3$ ), and mineral oil.

### Design and constructive characteristics

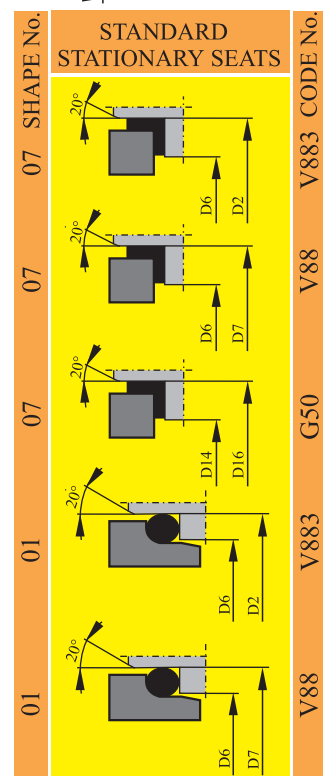
The flexible rubber bellows design enables a full flexibility compensating possible axial shaft play. The long compression ratio of the rubber bellows and the spring allows errors in the mechanical seal working length. It protects the shaft from any sedimentation and dirt. This makes it suitable for long time of constant work.

### LIMITING FACTORS

$D1 = 14 \dots 80$  mm  
 $p1 = 10$  bar  
 $t = -40 \dots 204^\circ\text{C}$   
 $Vg = 10$  m/s  
 $pV = 90$  bar m/s

### LIST OF ELEMENTS

1. Rotary seal ring
2. Stationary seat
3. Stationary seat secondary seal
4. Rubber bellows
5. Fixing and driving ring
6. Spring
7. Support ring
8. Fixing screw
9. Stationary seat secondary seal O - ring



## DIMENSION TABLE

D1	L1k	L1v	L13	L11	D7	D2	D23	D21	D30*	D3v	D33	D31	D16	D14	D6	L5	L6	Db
14	-	21,0	-	-	-	25	-	-	-	25,0	-	-	-	-	20	1,5	4	17
15	-	23,0	-	-	-	25	-	-	-	27,0	-	-	-	-	20,5	1,5	4	17
16	35,0	28,0	26,5	-	27	31,75	28	-	31	31,0	31	-	30,95	17,0	26	1,5	4	21
18	37,5	27,0	28,5	-	33	33	30	-	33	33,0	33	-	34,15	20,0	27	2,0	5	23
19/20	37,5	28,2	29,5	-	35	35	35	-	37	35,0	35	-	35,70	21,5	29	2,0	5	26
22	37,5	-	31,0	-	37	-	35	-	38	-	37	-	37,30	23,0	31	2,0	5	28
24	40,0	-	32,5	-	39	-	38	-	39	-	39	-	40,50	26,5	33	2,0	5	30
25	40,0	-	34,0	-	40	-	38	-	41	--	40	-	40,50	26,5	34	2,0	5	31
26	-	-	34,5	-	-	-	40	-	-	-	41	-	-	-	34	2,0	5	32
28	42,5	-	35,5	-	43	-	42	-	46	-	44	-	47,65	29,5	37	2,0	5	35
30	42,5	-	35,5	45	45	-	45	51	47	-	46	46	50,80	32,5	39	2,0	5	37
32	42,5	-	39,0	45	48	-	48	50,8	49	-	49	49	50,80	32,5	42	2,0	5	39
33	42,5	-	-	-	48	-	-	-	50	-	-	-	54,00	36,5	42	2,0	5	40
35	42,5	-	39,5	-	50	-	52	-	52,5	-	52	-	54,00	36,5	44	2,0	5	43
38	45,0	-	42,5	-	56	-	55	-	59	-	57	-	57,15	39,5	49	2,0	6	45
40	45,0	-	45,5	-	58	-	58	-	62	-	59	-	60,35	42,5	51	2,0	6	49
42	-	-	49,3	-	-	-	62	-	-	-	62	-	-	-	53,3	2,0	6	52
43	45,0	-	-	-	61	-	-	-	62	-	-	-	63,50	46,0	54	2,0	6	52
45	45,0	-	50,8	-	63	-	64	-	65	-	64	-	63,50	46,0	56	2,5	6	55
48	45,0	-	56,3	-	66	-	68,4	-	66	-	66	-	66,70	49,0	59	2,0	6	58
50	47,5	-	57,3	-	70	-	69,3	-	70,5	-	70	-	69,85	52,0	62	2,5	6	61
53	47,5	-	-	-	73	-	-	-	72	-	-	-	73,05	55,5	65	2,5	6	64
55	47,5	-	62,3	54,5	75	-	75,4	76,2	75	-	76	76	76,20	58,5	67	2,5	6	66
58	52,5	-	65,3	-	78	-	78,4	-	81	-	82	-	79,40	61,5	70	2,5	6	69
60	52,5	-	66,3	-	80	-	80,4	-	81	-	84	-	79,40	61,5	72	2,5	6	71
63	52,5	-	-	-	83	-	-	-	88	-	-	-	-	-	75	2,5	6	74
65	52,5	-	67,3	-	85	-	85,4	-	90	-	90	-	92,10	68,0	77	2,5	6	77
68	52,5	-	69,0	-	90	-	91,5	-	93	-	92	-	95,25	71,0	81	2,5	7	80
70	60,0	-	69,3	-	92	-	92	-	95	-	95	-	95,25	71,0	83	2,5	7	83
75	60,0	-	70,3	-	97	-	99	-	102	-	102	-	101,6	77,5	88	2,5	7	88
80	60,0	-	74,3	-	105	-	104	-	113	-	-	-	114,3	84,0	95	3,0	7	93

\* Starred columns values do not meet the DIN 24960 (EN 12756) standard

