

Elastomer Bellows

## Pac-Seal P190

Short axial length, heavy duty convoluted elastomer bellows seal design with wide non-DIN cross-section for optimum flexibility and durability. P190 seal is supplied with O-Ring type 8N seat as standard. Alternative boot mounted B9 type DIN seat and DIN short 8S and DIN long 8L seats are available.

### Operating Parameters

**Pressure** up to 16 bar  
**Temperature** -30 to 230°C  
**Speed** up to 10 m/s

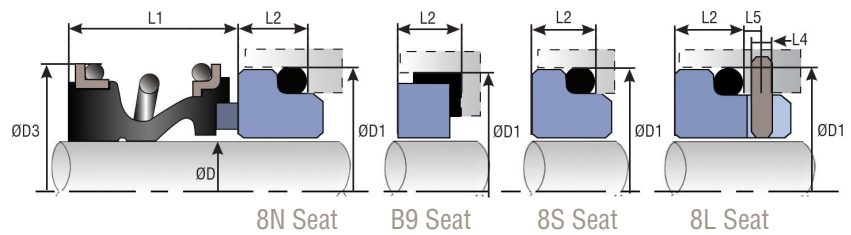
Actual performance limits depend on specific seal material, size, speed, pressure and media. Consult your Flowserve representative for any specific seal limits.

### Materials of Construction

**Metal Components** Stainless Steel  
**Rotary Face** Carbon, Silicon Carbide, Tungsten Carbide  
**Stationary Seat** Ceramic, Silicon Carbide, Tungsten Carbide  
**Elastomers** Nitrile, EPR, Viton



P190 with Seat Options



Shaft Size ØD (mm)	ØD1 (8N)	ØD1 (B9/8S/8L)	ØD3	L1	L2 (8N)	L2 (B9/8S)	L2 (8L)	L4 (8L)	L5 (8L)
10	19.20	21.00	20.00	14.50	6.60	6.60	10.00	3.00	5.00
12	21.60	23.00	24.30	15.00	5.60	6.60	10.00	3.00	5.00
14	24.60	25.00	28.50	17.00	5.60	6.60	10.00	3.00	5.00
15	24.60	27.00	28.50	17.00	6.60	6.60	10.00	3.00	5.00
16	28.00	27.00	28.50	17.00	7.50	6.60	11.50	3.00	5.00
18	30.00	33.00	31.00	19.50	8.00	7.50	11.50	3.00	5.00
20	35.00	35.00	36.50	21.50	7.50	7.50	11.50	3.00	5.00
22	35.00	37.00	36.50	21.50	7.50	7.50	11.50	3.00	5.00
24	38.00	39.00	41.10	22.50	7.50	7.50	11.50	3.00	5.00
25	38.00	40.00	41.10	23.00	7.50	7.50	11.50	3.00	5.00
28	42.00	43.00	47.60	26.50	9.00	7.50	11.50	3.00	5.00
30	45.00	45.00	47.60	26.50	10.50	7.50	11.50	3.00	5.00
32	48.00	48.00	51.00	27.50	10.50	7.50	11.50	3.00	5.00
33	50.00	48.00	51.00	27.50	11.00	7.50	11.50	3.00	5.00
35	52.00	50.00	54.50	28.50	11.00	7.50	11.50	3.00	5.00
38	55.00	56.00	57.90	30.00	10.30	9.00	14.00	4.00	5.00
40	58.00	58.00	60.00	30.00	10.80	9.00	14.00	4.00	5.00
43	62.00	61.00	63.80	30.00	12.00	9.00	14.00	4.00	5.00
45	64.00	63.00	65.70	30.00	11.60	9.00	14.00	4.00	5.00
48	68.40	66.00	69.30	30.50	11.60	9.00	14.00	4.00	5.00
50	69.30	70.00	71.80	30.50	11.60	9.50	15.00	4.00	5.00
53	72.30	73.00	76.00	33.00	12.30	11.00	15.00	4.00	5.00
55	75.40	75.00	78.30	35.00	13.30	11.00	15.00	4.00	5.00
58	78.40	78.00	82.50	37.00	13.30	11.00	15.00	4.00	5.00
60	80.40	80.00	85.50	38.00	13.30	11.00	15.00	4.00	5.00
65	85.40	85.00	90.30	40.00	13.00	11.00	15.00	4.00	5.00
68	91.50	90.00	94.00	40.00	13.70	11.30	18.00	4.00	5.00
70	92.00	92.00	97.00	40.00	13.00	11.30	18.00	4.00	5.00
75	99.00	97.00	102.00	40.00	14.00	11.30	18.00	4.00	5.00
80	104.00	105.00	109.50	40.00	15.00	12.00	18.20	4.00	5.00
85	109.00	110.00	116.70	41.00	14.80	14.00	18.20	4.00	5.00
90	114.00	115.00	122.30	45.00	14.80	14.00	18.20	4.00	5.00
95	120.30	120.00	127.60	46.00	15.80	14.00	17.20	4.00	5.00
100	123.30	125.00	132.00	47.00	15.80	14.00	17.20	4.00	5.00



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