

HJ92N

Mechanical seals | Mechanical seals for pumps | Pusher seals



Features

- For unstepped shafts
- Single seal
- Balanced
- Independent of direction of rotation
- Encapsulated rotating spring

Advantages

- Especially designed for solids containing and highly viscous media
- Springs are protected from the product
- Rugged and reliable design
- No damage of the shaft by dynamically loaded O-Ring
- Universal application
- Variant for operation under vacuum available
- Variants for sterile operation available

Operating range

Shaft diameter:

$d_1 = 18 \dots 100 \text{ mm} (0.625" \dots 4")$

Pressure:

$p_1^*) = 0.8 \text{ abs.} \dots 25 \text{ bar} (12 \text{ abs.} \dots 363 \text{ PSI})$

Temperature:

$t = -50 \text{ }^\circ\text{C} \dots +220 \text{ }^\circ\text{C} (-58 \text{ }^\circ\text{F} \dots +430 \text{ }^\circ\text{F})$

Sliding velocity: $v_g = 20 \text{ m/s} (66 \text{ ft/s})$

Axial movement: $\pm 0.5 \text{ mm}$

* An integral stationary seat lock is not needed within the permissible low pressure range. For prolonged operation under vacuum it is necessary to arrange for quenching on the atmospheric side.

Materials

Seal face: Carbon graphite antimony impregnated (A),
Carbon graphite resin impregnated (B)
Seat G16: Silicon carbide (Q1)

Standards and approvals

- EN 12756

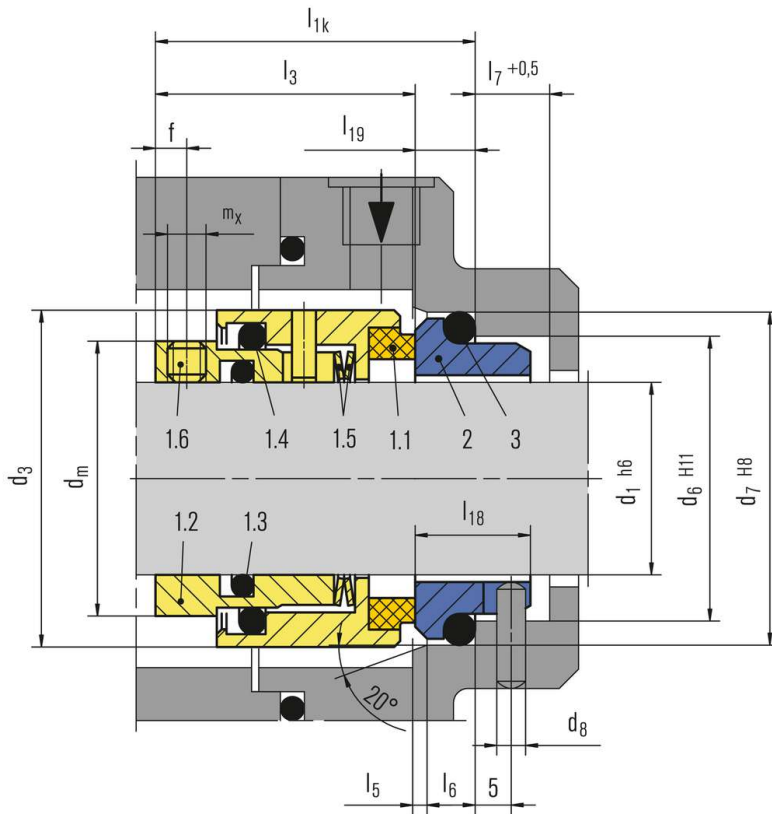
Notes

Variant for sterile applications available. Please inquire.

Recommended applications

- Pharmaceutical industry
- Power plant technology
- Pulp and paper industry
- Water and waste water technology
- Mining industry
- Food and beverage industry
- Sugar industry
- Dirty, abrasive and solids containing media
- Thick juice (70 ... 75 % sugar content)
- Raw sludge, sewage slurries
- Raw sludge pumps
- Thick juice pumps
- Conveying and bottling of dairy products

RELY ON EXCELLENCE

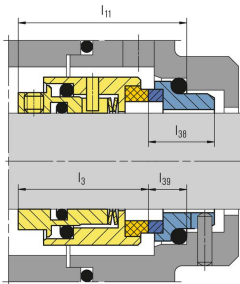


Item Part no. to Description
DIN 24250

1.1	472/473	Seal face
1.2	485	Drive collar
1.3	412.2	O-Ring
1.4	412.1	O-Ring
1.5	477	Spring
1.6	904	Set screw
2	475	Seat (G16)
3	412.3	O-Ring

RELY ON EXCELLENCE

Product variants



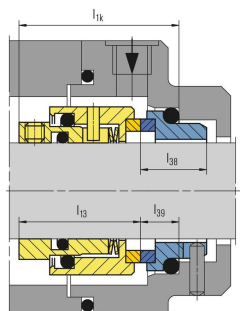
HJ927GN

Items and description as HJ92N.

Seal face: Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B)

Seat G46: Silicon carbide (Q12)

Installations length l_{11} ($= l_3 + l_{39}$) is longer than l_{1k} .



HJ977GN

Items and description as HJ92N.

Seal face: Silicon carbide (Q12)

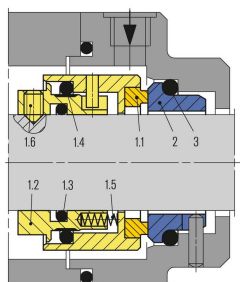
Seat G46: Silicon carbide (Q12)

Installation length l_{1k}

Operating range:

Temperature: $t = -20\text{ °C} \dots +180\text{ °C}$ ($-4\text{ °F} \dots +356\text{ °F}$)

Sliding velocity: $v_g = 10\text{ m/s}$ (33 ft/s)



HJ4...

Mechanical seals with product-protected multiple springs, for high pressure applications.

Pressure: $p = \text{max. } 50\text{ bar}$ (725 PSI)

Shaft diameter: $d_1 > 100\text{ mm}$ (3.94").

Smaller diameters and higher pressures on request.

RELY ON EXCELLENCE

HJ97GN5

Items and description as HJ92N.

Seal face: Silicon carbide (Q12)

Seat G16: Silicon carbide (Q1)

Installations length l_{12} (= $l_{13} + l_{19}$) is shorter than l_{1k} .

Dimensions

d ₁	d ₃	d ₆	d ₇	d ₈	d _m	l _{1k}	l ₃	l ₅	l ₆	l ₇	l ₁₈	l ₁₉	l ₁₁ ¹⁾	l ₁₂ ²⁾	l ₁₃	l ₃₈	l ₃₉	f	m _x
18	32	27	33	3	26.0	37.5	30.5	2.0	5	9	15.0	7.0	39.5	35.5	28.5	17.0	9.0	3.0	M4
20	34	29	35	3	28.0	37.5	30.5	2.0	5	9	15.0	7.0	39.5	35.5	28.5	17.0	9.0	3.0	M4
22	36	31	37	3	30.0	37.5	30.5	2.0	5	9	15.0	7.0	39.5	35.5	28.5	17.0	9.0	3.0	M4
24	38	33	39	3	32.5	40.0	33.0	2.0	5	9	15.0	7.0	42.0	38.0	31.0	17.0	9.0	3.5	M5
25	39	34	40	3	33.5	40.0	33.0	2.0	5	9	15.0	7.0	42.0	38.0	31.0	17.0	9.0	3.5	M5
28	42	37	43	3	36.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
30	44	39	45	3	38.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
32	47	42	48	3	41.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
33	47	42	48	3	41.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
35	49	44	50	3	43.5	42.5	35.5	2.0	5	9	15.0	7.0	45.0	40.0	33.0	17.5	9.5	3.5	M5
38	54	49	56	4	47.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
40	56	51	58	4	49.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
43	59	54	61	4	52.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
45	61	56	63	4	54.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
48	64	59	66	4	57.5	45.0	37.0	2.0	6	9	16.0	8.0	47.5	42.5	34.5	18.5	10.5	4.0	M5
50	66	62	70	4	59.5	47.5	38.0	2.5	6	9	17.0	9.5	50.0	45.0	35.5	19.5	12.0	4.5	M6
53	69	65	73	4	62.5	47.5	38.0	2.5	6	9	17.0	9.5	50.0	45.0	35.5	19.5	12.0	4.5	M6
55	71	67	75	4	64.5	47.5	38.0	2.5	6	9	17.0	9.5	50.0	45.0	35.5	19.5	12.0	4.5	M6
58	78	70	78	4	68.5	52.5	42.0	2.5	6	9	18.0	10.5	55.0	50.0	39.5	20.5	13.0	4.5	M6
60	80	72	80	4	70.5	52.5	42.0	2.5	6	9	18.0	10.5	55.0	50.0	39.5	20.5	13.0	4.5	M6
63	83	75	83	4	73.5	52.5	42.0	2.5	6	9	18.0	10.5	55.0	50.0	39.5	20.5	13.0	4.5	M6
65	85	77	85	4	75.5	52.5	42.0	2.5	6	9	18.0	10.5	55.0	50.0	39.5	20.5	13.0	4.5	M6
68	88	81	90	4	78.5	52.5	41.5	2.5	7	9	18.5	11.0	55.0	50.0	39.0	21.0	13.5	4.5	M6
70	90	83	92	4	80.5	60.0	48.5	2.5	7	9	19.0	11.5	62.5	57.5	46.0	21.5	14.0	5.0	M6
75	99	88	97	4	89.0	60.0	48.5	2.5	7	9	19.0	11.5	62.5	57.5	46.0	21.5	14.0	5.5	M8
80	104	95	105	4	94.0	60.0	48.5	3.0	7	9	19.0	11.5	62.5	57.5	46.0	21.5	14.0	5.5	M8
85	109	100	110	4	99.0	60.0	48.5	3.0	7	9	19.0	11.5	62.5	57.5	46.0	21.5	14.0	5.5	M8
90	114	105	115	4	104.0	65.0	52.0	3.0	7	9	20.5	13.0	67.5	62.5	49.5	23.0	15.5	5.5	M8
95	119	110	120	4	109.0	65.0	52.0	3.0	7	9	20.5	13.0	67.5	62.5	49.5	23.0	15.5	5.5	M8
100	124	115	125	4	114.0	65.0	52.0	3.0	7	9	20.5	13.0	67.5	62.5	49.5	23.0	15.5	5.5	M8

Dimensions in millimeter