

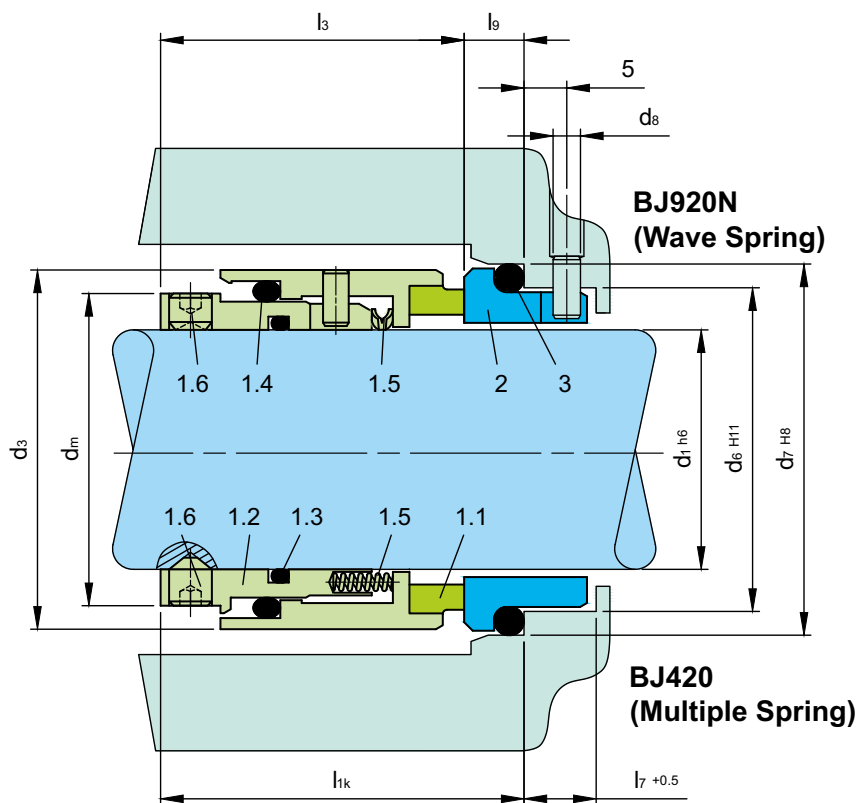


Product Description

- 1. Single seal configuration
- 2. Balanced design
- 3. Independent of direction of rotation
- 4. For plain shafts
- 5. Rotary unit with encapsulated spring design

Technical Features

- 1. Compact design with rugged construction
- 2. Capable of withstanding high pressure
- 3. O-ring is dynamically loaded to prevent shaft damage.
- 4. Can handle media with solid content and viscous media
- 5. Can handle sterile and vacuum application
- 6. Springs are product protected to avoid contamination



Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure.

Item	Part no.	Description
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

DIN 24250

Typical Industrial Applications	
Dirty & abrasive media	Slurries
Food & dairy technology	Sterile technology
Media with solids	Sugar
Pulp & paper	Thick juice
Raw sludge	Water & waste water
Sewage	

Performance Capabilities	
Sizes:	d ₁ * = Upto 100 mm (Upto 4.000")
Pressure:	p ₁ * = 0.8abs...25 bar (12abs...363 PSI)
Temperature:	t = -50 °C ...220 °C (-58 °F ... +430 °F)
Speed:	= 20 m/s (66 ft/s)

*) 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 atmosphere.

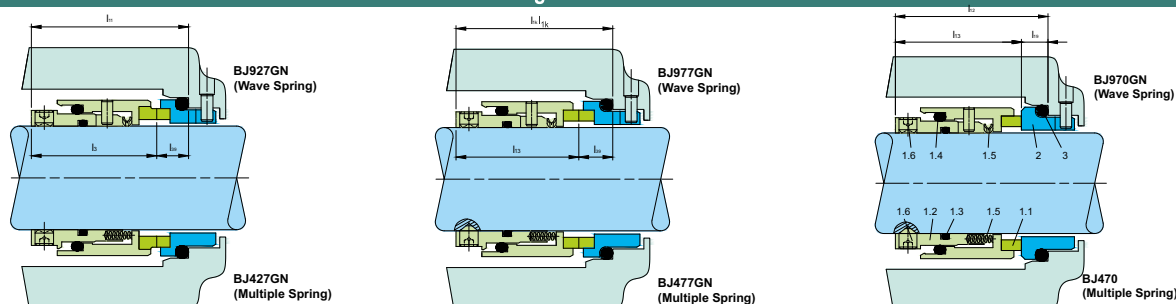
Permissible Axial Movement
± 1.0 mm

Standards
EN 12756

Notes
Variant for sterile applications available. Please enquire.

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

Design Variations



BJ927GN

Items and description as BJ920N	
Seal face:	Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B)
Seat G46:	Silicon carbide (Q12)
1) Installations length l_{11} ($= l_3 + l_{39}$) is longer than l_{1k}	

BJ977GN

Items and description as BJ920N	
Seal face:	Silicon carbide (Q12)
Seat G46:	Silicon carbide (Q12)
Installations length l_{1k}	
Operating range:	
Temperature:	$t = -20\text{ }^{\circ}\text{C} \dots +180\text{ }^{\circ}\text{C}$ ($-4\text{ }^{\circ}\text{F} \dots +356\text{ }^{\circ}\text{F}$)
Speed:	$= 10\text{ m/s (33 ft/s)}$

BJ970GN

Items and description as BJ920N	
Seal face:	Silicon carbide (Q12)
Seat G16:	Silicon carbide (Q1)
2) Installations length l_{12} ($= l_{13} + l_{19}$) is shorter than l_{1k}	

BJ470GN

Mechanical seals with product-protected multiple springs, for high pressure applications	
Pressure:	$p = \text{max. } 50\text{ bar (725 PSI)}$
Shaft diameter:	$d, > \text{Upto } 100\text{ mm (Upto } 4.000\text{'')}$
Smaller diameters and higher pressures on request.	

Dimensional Data

Dimensions in millimeter

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

inch size available from size 0.750 to 4.000

Note: Additional technical & dimensional information will be provided on request.

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